



José Manuel Cano Rodríguez

Generated from: Editor CVN de FECYT

Date of document: 14/01/2017

v 1.4.0

f743642cd1b7a0c4601d1426f4a256fe

This electronic file (PDF) has embedded CVN technology (CVN-XML). The CVN technology of this file allows you to export and import curricular data from and to any compatible data base. List of adapted databases available at: <http://cvn.fecyt.es/>

**José Manuel Cano Rodríguez**

Surname(s): **Cano Rodríguez**
 Name: **José Manuel**
 DNI: **09406074V**
 Date of birth: **17/01/1971**
 Gender: **Male**
 Nationality: **Spain**
 Country of birth: **Spain**
 Aut. region/reg. of birth: **Principality of Asturias**
 Contact province: **Asturias**
 City of birth: **Oviedo**
 Contact address: **Edificio Departamental Oeste - 4.2.26**
 Rest of contact address: **Campus de Gijón**
 Postcode: **33204**
 Contact country: **Spain**
 Contact aut. region/reg.: **Principality of Asturias**
 Contact city: **Gijón**
 Land line phone: **(34) 985182625**
 Email: **jmcano@uniovi.es**
 Mobile phone: **(34) 686752140**

Current professional situation**Employing entity:** Universidad de Oviedo**Department:** Ingeniería Eléctrica, Electrónica de Computadores y Sistemas, Escuela Politécnica Superior de Ingeniería de Gijón**Professional category:** Profesor Titular de Universidad**Start date:** 31/07/2003**Type of contract:** Civil servant**Dedication regime:** Full time**Primary (UNESCO code):** 330607 - Rotating machinery; 330609 - Transmission and distribution

Identify key words: Electronic converters for network qualities; Electronic converters for drive of electrical machines; Modeled of electronic converters of power; Integration of renewable energy sources; Analysis of overtone on electric systems; Electronic converters for control of electrical machines; Electrical machines tests; Electric machine maintenance; Compensation of reactive distribution networks; Lack locations; Quality of waves and harmonics; Active and passive filters; Distributed generation

Previous positions and activities

	Employing entity	Professional category	Start date
1	Universidad de Oviedo	Miembro Electo del Claustro de la Universidad de Oviedo en Representación del Colectivo/Sector A	05/06/2008
2	Universidad de Oviedo	Director de Área de Instalaciones y Servicios Externos	13/04/2012

	Employing entity	Professional category	Start date
3	Universidad de Oviedo	Director de Área de Mantenimiento y Sostenibilidad	19/05/2008
4	Universidad de Oviedo	Secretario del Departamento de Ingeniería Eléctrica, Electrónica de Computadores y Sistemas	19/11/2004
5	Universidad de Oviedo	Profesor Titular de Universidad Interino	31/10/2000
6	Universidad de Oviedo	Profesor Asociado Tipo 2	01/12/1996
7	Universidad de Oviedo	Profesor Asociado Tipo 1	01/11/1996
8	Unión Fenosa - Central Térmica del Narcea	Ingeniero en prácticas	01/07/1996
9	Robert BOSCH GmbH	Ingeniero en prácticas	01/11/1995

1 **Employing entity:** Universidad de Oviedo
Professional category: Miembro Electo del Claustro de la Universidad de Oviedo en Representación del Colectivo/Sector A
Start-End date: 05/06/2008 - 12/11/2012 **Duration:** 4 years - 5 months - 15 days

Field of management activity: University

2 **Employing entity:** Universidad de Oviedo
Department: Vicerrectorado de Campus, Centros y Departamentos
City employing entity: Spain
Professional category: Director de Área de Instalaciones y Servicios Externos
Start-End date: 13/04/2012 - 21/05/2012 **Duration:** 29 days
Performed tasks: Adjunto al Vicerrector de Campus, Centros y Departamentos.
Field of management activity: University

3 **Employing entity:** Universidad de Oviedo
Department: Vicerrectorado de Infraestructuras, Campus y Sostenibilidad
City employing entity: Spain
Professional category: Director de Área de Mantenimiento y Sostenibilidad
Start-End date: 19/05/2008 - 12/04/2012 **Duration:** 3 years - 10 months - 32 days
Performed tasks: Adjunto al Vicerrector de Infraestructuras, Campus y Sostenibilidad.
Field of management activity: University

4 **Employing entity:** Universidad de Oviedo
Department: Ingeniería Eléctrica, Electrónica de Computadores y Sistemas
Professional category: Secretario del Departamento de Ingeniería Eléctrica, Electrónica de Computadores y Sistemas
Start-End date: 19/11/2004 - 16/05/2008 **Duration:** 3 years - 5 months - 28 days
Field of management activity: University

5 **Employing entity:** Universidad de Oviedo **Type of entity:** University
Department: Ingeniería Eléctrica, Electrónica de Computadores y Sistemas
Professional category: Profesor Titular de Universidad Interino
Start-End date: 31/10/2000 - 30/07/2003 **Duration:** 2 years - 8 months - 31 days
Dedication regime: Full time



Performed tasks: Actividad Docente e Investigadora

- 6** **Employing entity:** Universidad de Oviedo **Type of entity:** University
Department: Ingeniería Eléctrica, Electrónica de Computadores y Sistemas
Professional category: Profesor Asociado Tipo 2
Start-End date: 01/12/1996 - 30/10/2000 **Duration:** 3 years - 11 months
Dedication regime: Full time
Performed tasks: Actividad Docente e Investigadora
- 7** **Employing entity:** Universidad de Oviedo **Type of entity:** University
Department: Ingeniería Eléctrica, Electrónica de Computadores y Sistemas
Professional category: Profesor Asociado Tipo 1
Start-End date: 01/11/1996 - 30/11/1996 **Duration:** 1 month
Dedication regime: Full time
Performed tasks: Actividad Docente e Investigadora
- 8** **Employing entity:** Unión Fenosa - Central **Type of entity:** Business
Térmica del Narcea
City employing entity: Soto de la Barca, Tineo, Principality of Asturias, Spain
Professional category: Ingeniero en prácticas
Start-End date: 01/07/1996 - 31/08/1996 **Duration:** 2 months
Type of contract: Trabajo en Prácticas
Dedication regime: Full time
Performed tasks: Labores en el Departamento Mecánico de Mantenimiento
- 9** **Employing entity:** Robert BOSCH GmbH
City employing entity: Bühl, Baden-Wurtemberg, Karlsruhe, Germany
Professional category: Ingeniero en prácticas
Start-End date: 01/11/1995 - 31/03/1996 **Duration:** 5 months
Type of contract: Contrato en prácticas
Performed tasks: Ciclo formativo en fábrica de motores de la empresa en Alemania.



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree

Name of qualification: Ingeniero Industrial Línea Curricul. Ingeniería Eléctrica

Degree awarding entity: Universidad de Oviedo **Type of entity:** University

Date of qualification: 27/09/1996

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Control de Procesos, Electrónica Industrial e Ingeniería Eléctrica

Degree awarding entity: Universidad de Oviedo **Type of entity:** University

Date of degree: 11/10/2000

Thesis title: Funciones de Transferencia para el Análisis en Distintas Condiciones de Funcionamiento de la Distorsión Armónica Asociada a Rectificadores Trifásicos

Thesis director: A. Orcajo, Gonzalo

Obtained qualification: Sobresaliente cum Laude por unanimidad de los miembros del tribunal

Special doctorate award: Yes **Date of award:** 2001

Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)

- 1** **Type of training:** Course
Training title: Machine Learning
City awarding entity: United States of America
Awarding entity: Stanford University - Coursera **Type of entity:** University
Training manager: Andrew Ng
End date: 03/10/2016 **Duration in hours:** 40 hours
- 2** **Type of training:** Tutorial
Training title: Linearized Modeling and Stability Analysis of AC Power Electronic Based Power Systems
City awarding entity: United States of America
Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)
Training manager: Frede Blaabjerg
End date: 18/09/2016 **Duration in hours:** 4 hours
- 3** **Type of training:** Tutorial
Training title: Predictive Control - A simple and Powerful Method of Control Power Converters and Drives
City awarding entity: United States of America
Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)
Training manager: Frede Blaabjerg



End date: 18/09/2016

Duration in hours: 4 hours

4 Type of training: Webinario

Training title: IEEE Standards Enable a Reliable, Secure, Interoperable Smart Grid

City awarding entity: United States of America

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Steven Collier

End date: 23/11/2015

Duration in hours: 1 hour

5 Type of training: Tutorial

Training title: Distribution Volt/VAR Control and Optimization

City awarding entity: Denver, CO, United States of America

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Larry Clark

End date: 29/07/2015

Duration in hours: 8 hours

6 Type of training: Tutorial

Training title: Smart Distribution Systems

City awarding entity: Denver, CO, United States of America

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Larry Clark

End date: 26/07/2015

Duration in hours: 8 hours

7 Type of training: Tutorial

Training title: Implementation of Synchrophasor Systems

City awarding entity: National Harbor, MD, United States of America

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Vahid Madani

End date: 30/07/2014

Duration in hours: 8 hours

8 Type of training: Tutorial

Training title: Smart Grid 308: Distributed Energy Resources

City awarding entity: Vancouver, BC, Canada

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Doug Houseman

End date: 25/07/2013

Duration in hours: 4 hours

9 Type of training: Tutorial

Training title: Renewable Energy Plant Design and System Interconnection

City awarding entity: Vancouver, Canada

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Younan Lawando

End date: 24/07/2013

Duration in hours: 8 hours

10 Type of training: Tutorial

Training title: Microgrids - Designing their Role in Smart Grid

City awarding entity: Vancouver, BC, Canada

Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)

Training manager: Steve Pullins

End date: 22/07/2013

Duration in hours: 4 hours



- 11** **Type of training:** Tutorial
Training title: Power Quality- From Lighting and Harmonics to Variable Energy Resources
City awarding entity: Vancouver, BC, Canada
Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)
Training manager: Mark McGranahan
End date: 21/07/2013 **Duration in hours:** 8 hours
- 12** **Training title:** Distributed Generation
Awarding entity: The Institute of Electrical and Electronics Engineers, Inc. (IEEE)
End date: 06/12/2012 **Duration in hours:** 3 hours
- 13** **Training title:** Armónicos, Huecos y Desequilibrios: Las Perturbaciones que Amenazan mi Instalación
Awarding entity: Leonardo Power Quality Initiative
End date: 24/11/2005 **Duration in hours:** 4 hours
- 14** **Training title:** Medida de Capacidad, Tangente Delta y Descargas Parciales
Awarding entity: DRILCO S.A.
End date: 09/06/2000 **Duration in hours:** 30 hours
- 15** **Training title:** Tópicos Selectos en Electrónica de Potencia
Awarding entity: Universidad de Oviedo
End date: 30/11/1993 **Duration in hours:** 30 hours
- 16** **Training title:** Curso Electrotécnico
Awarding entity: Merlin Gerin - Groupe Schneider
End date: 03/11/1993 **Duration in hours:** 8 hours
- 17** **Training title:** Introducción al Dibujo Asistido por Computador
Awarding entity: Universidad de Oviedo
End date: 17/07/1992 **Duration in hours:** 35 hours

Attended advanced, improvement and innovative teacher training and new technology courses and seminars focused on improving teaching

- 1** **Title of course/seminar:** Intensificación en Pronunciación y Fonética Correctiva del Inglés
Goals of the course/seminar: Mejora del inglés para la docencia universitaria
Organising entity: Universidad de Oviedo
Faculty, institute or centre: La Casa de las Lenguas
Duration in hours: 20 hours
Start-End date: 28/09/2015 - 04/11/2015
- 2** **Title of course/seminar:** Creación y Gestión de Acuerdos Erasmus+ y Convenio: Un Enfoque Práctico
Goals of the course/seminar: Creación de acuerdos internacionales
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 29/04/2015 - 06/05/2015



- 3** **Title of course/seminar:** Cómo Utilizar el Campus Virtual de la Universidad de Oviedo. Nivel Avanzado.
Goals of the course/seminar: Capacitación para impartir docencia online
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 18 hours
Start-End date: 27/01/2015 - 20/02/2015
- 4** **Title of course/seminar:** Orientaciones para la Evaluación de Solicitudes Científico-técnicas en la ANEP
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 27/05/2013 - 27/05/2013
- 5** **Title of course/seminar:** Fuentes de Financiación Europea para Proyectos de Investigación. De la Idea Inicial a la Gestión Posterior.
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 14/03/2013 - 15/03/2013
- 6** **Title of course/seminar:** SEBSCO. Una Experiencia Alternativa para Evaluar Competencias
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 17/02/2012 - 17/02/2012
- 7** **Title of course/seminar:** Estilos de Aprendizaje y Estrategias de Enseñanza
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 12 hours
Start-End date: 20/11/2003 - 21/11/2003
- 8** **Title of course/seminar:** Tutoría Universitaria
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 18/04/2002 - 19/04/2002
- 9** **Title of course/seminar:** La Elaboración de Pruebas Objetivas
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 13/12/2001 - 14/12/2001
- 10** **Title of course/seminar:** Evaluación y Mejora de la Enseñanza Universitaria: la Carpeta Docente
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 22/11/2001 - 23/11/2001



- 11 Title of course/seminar:** Dinámica de Grupos. Técnicas de Conducción y Acción Dinámica del Grupo
Organising entity: Universidad de Oviedo
Faculty, institute or centre: Instituto de Ciencias de la Educación
Duration in hours: 10 hours
Start-End date: 08/11/2001 - 09/11/2001

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
German		A1	A1	A1	A1
English		C1	C1	C1	C1

Teaching experience

General teaching experience

- 1 Type of teaching:** Official teaching
Name of the course: Electrotecnia
Type of programme: Engineering
Type of subject: Core
University degree: Ingeniero de Minas
Start date: 2013 **End date:** 2014
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 126
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Escuela Técnica Superior de Ingenieros de Minas
City of entity: Spain
- 2 Name of the course:** Conferencias y Seminarios III
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Ingenieria Mecatronica
Start date: 2013 **End date:** 2014
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 10
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain
- 3 Name of the course:** Distributed Generation Systems and Power Quality
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Conversión de Energía Eléctrica y Sistemas de Potencia
Start date: 2013 **End date:** 2014
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 45
Entity: Universidad de Oviedo **Type of entity:** University



Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain
Subject language: English

4 **Name of the course:** Electrical Machines for Generation and Traction
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Conversión de Energía Eléctrica y Sistemas de Potencia
Start date: 2013 **End date:** 2014
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 12
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain
Subject language: English

5 **Type of teaching:** Official teaching
Name of the course: Electrotecnia
Type of programme: Engineering
Type of subject: Core
University degree: Ingeniero de Minas
Start date: 2012 **End date:** 2013
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 126
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Escuela Técnica Superior de Ingenieros de Minas
City of entity: Spain

6 **Name of the course:** Conferencias y Seminarios III
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Ingeniería Mecatronica
Start date: 2012 **End date:** 2013
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 10
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain

7 **Name of the course:** Distributed Generation Systems and Power Quality
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Conversión de Energía Eléctrica y Sistemas de Potencia
Start date: 2012 **End date:** 2013
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 45
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain
Subject language: English



- 8** **Type of teaching:** Official teaching
Name of the course: Electrotecnia
Type of programme: Engineering
Type of subject: Core
University degree: Ingeniero de Minas
Start date: 2011 **End date:** 2012
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 126
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Escuela Técnica Superior de Ingenieros de Minas
City of entity: Spain
- 9** **Name of the course:** Conferencias y Seminarios III
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Ingenieria Mecatronica
Start date: 2011 **End date:** 2012
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 10
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain
- 10** **Name of the course:** Distributed Generation Systems and Power Quality
Type of programme: Master's degree
Type of subject: Obligatory
University degree: Master en Conversión de Energía Eléctrica y Sistemas de Potencia
Start date: 2011 **End date:** 2012
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 45
Entity: Universidad de Oviedo **Type of entity:** University
Faculty, institute or centre: Centro Internacional de Postgrado
City of entity: Spain
Subject language: English
- 11** **Name of the course:** Accionamientos Electricos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 5 (2003)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 12** **Name of the course:** Calculo, Construccion y Ensayo de Maquinas Electricas (Elec- A)
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work



Type of subject: Core

University degree: Ingeniero Industrial

Course given: 5 (2002)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 50

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

13 Name of the course: Calculo, Construccion y Ensayo de Maquinas Electricas (Elec- A)

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Industrial

Course given: 5 (2003)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

14 Name of the course: Calculo, Construccion y Ensayo de Maquinas Electricas (Elec- A)

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Obligatory

University degree: Ingeniero Industrial

Course given: 5 (2001)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 40

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

15 Name of the course: Centrales y Redes Electricas (Combener)

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 6 (2001)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain



- 16** **Name of the course:** Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero Técnico Industrial, Especialidad en Electricidad
Course given: 1 (2002)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 7
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 17** **Name of the course:** Electrotecnia
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero Técnico Forestal, Especialidad en Explotaciones Forestales
Course given: 2 (2005)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 10
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 18** **Name of the course:** Electrotecnia I
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Obligatory
University degree: Ingeniero Industrial
Course given: 3 (2001)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 90
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 19** **Name of the course:** Fundamentos de Ingenieria Electrica
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Obligatory
University degree: Master en Ingenieria Mecatronica
Course given: 1 (2008)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 140
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain



- 20** **Name of the course:** Fundamentos de Ingeniería Eléctrica
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Obligatory
University degree: Master en Ingeniería Mecatrónica
Course given: 1 (2008)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 1.600
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 21** **Name of the course:** Maquinas Eléctricas
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero de Minas
Course given: 3 (2002)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 60
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 22** **Name of the course:** Maquinas Eléctricas
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero de Minas
Course given: 3 (2003)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 45
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 23** **Name of the course:** Maquinas Eléctricas
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero de Minas
Course given: 3 (2004)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 45
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,



City of entity: Spain

24 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2005)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

25 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2006)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 35

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

26 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Obligatory

University degree: Ingeniero de Minas

Course given: 3 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

27 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2002)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 60

Entity: Universidad de Oviedo



Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

28 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2003)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 60

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

29 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2004)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 60

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

30 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2005)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

31 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2006)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30



Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

32 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2009)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 20

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

33 Name of the course: Maquinas Electricas

Professional category: Prof. Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 3 (2010)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 20

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

34 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Obligatory

University degree: Ingeniero de Minas

Course given: 3 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

35 Name of the course: Maquinas Electricas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Obligatory

University degree: Ingeniero de Minas

Course given: 3 (2008)

Type of hours/ ECTS credits: Hours



Hours/ECTS credits: 20

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

36 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Electricidad

Course given: 3 (2006)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 5

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

37 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Electrónica Industrial

Course given: 3 (2006)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 5

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

38 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Mecánica

Course given: 3 (2006)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 5

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

39 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Química Industrial

Course given: 3 (2006)



Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 5

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

40 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Electrónica Industrial

Course given: 3 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 11

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

41 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Mecánica

Course given: 3 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 11

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

42 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Técnico Industrial, Especialidad en Química Industrial

Course given: 3 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 11

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

43 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Industrial



Course given: 5 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 4

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

44 Name of the course: Proyecto Fin de Carrera

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Obligatory

University degree: Ingeniero Técnico Industrial, Especialidad en Electricidad

Course given: 3 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 11

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

45 Name of the course: Proyecto Fin de Carrera Ingeniero de Minas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 5 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 4

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

46 Name of the course: Proyecto Fin de Carrera Ingeniero de Minas

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 5 (2008)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 4

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

47 Name of the course: Proyecto Fin de Postgrado

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Optional



University degree: Master en Ingeniería Mecatronica

Course given: 2 (2008)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 150

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

48 Name of the course: Sensores y Actuadores

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Obligatory

University degree: Master en Ingeniería Mecatronica

Course given: 2 (2008)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 130

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

49 Name of the course: Sensores y Actuadores

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Obligatory

University degree: Master en Ingeniería Mecatronica

Course given: 2 (2008)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 20

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

50 Name of the course: Sensores y Actuadores

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Obligatory

University degree: Master en Ingeniería Mecatronica

Course given: 2 (2009)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 150

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

51 Name of the course: Sensores y Actuadores

Professional category: Prof. Titular de Universidad

Type of programme: Others

Type of teaching: In person theory



Type of subject: Obligatory

University degree: Máster Universitario en Ingeniería Mecatrónica por la Universidad de Oviedo

Course given: 2 (2010)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 1

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

52 Name of the course: Simulación, Modelado y Compatibilidad Electromagnética de Sistemas Eléctricos y Electrónicos de Potencia

Professional category: Prof. Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Obligatory

University degree: Máster Universitario en Control de Procesos, Electrónica Industrial e Ingeniería Eléctrica por la Universidad de Oviedo

Course given: 1 (2010)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 0

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

53 Name of the course: Teoría de Circuitos

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Industrial

Course given: 2 (2004)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

54 Name of the course: Teoría de Circuitos

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero Industrial

Course given: 2 (2005)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain



- 55** **Name of the course:** Teoría de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 2 (2006)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 56** **Name of the course:** Teoría de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 2 (2007)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 57** **Name of the course:** Teoría de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Optional
University degree: Ingeniero Industrial
Course given: 2 (2003)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 58** **Name of the course:** Teoría de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 2 (2004)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 60
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain



- 59** **Name of the course:** Teoria de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 2 (2005)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 60
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 60** **Name of the course:** Teoria de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 2 (2006)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 60
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 61** **Name of the course:** Teoria de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Core
University degree: Ingeniero Industrial
Course given: 2 (2007)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 60
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 62** **Name of the course:** Teoria de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Obligatory
University degree: Ingeniero Industrial
Course given: 2 (2002)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 30
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,



City of entity: Spain

- 63** **Name of the course:** Teoria de Circuitos
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** In person theory
Type of subject: Optional
University degree: Ingeniero Industrial
Course given: 2 (2003)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 60
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 64** **Name of the course:** Teoria de Circuitos. Electrotecnia
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero de Minas
Course given: 2 (2002)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 65** **Name of the course:** Teoria de Circuitos. Electrotecnia
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero de Minas
Course given: 2 (2003)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo
Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,
City of entity: Spain
- 66** **Name of the course:** Teoria de Circuitos. Electrotecnia
Professional category: Titular de Universidad
Type of programme: Others **Type of teaching:** Laboratory work
Type of subject: Core
University degree: Ingeniero de Minas
Course given: 2 (2004)
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 15
Entity: Universidad de Oviedo



Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

67 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2005)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

68 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2006)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

69 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

70 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2008)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15



Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

71 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2009)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

72 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Prof. Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2010)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

73 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: Laboratory work

Type of subject: Obligatory

University degree: Ingeniero de Minas

Course given: 2 (2001)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

74 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2002)

Type of hours/ ECTS credits: Hours



Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

75 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2003)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

76 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2004)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

77 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2005)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

78 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2006)



Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

79 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2007)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

80 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2008)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

81 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas

Course given: 2 (2009)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

82 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Prof. Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Core

University degree: Ingeniero de Minas



Course given: 2 (2010)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 15

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

83 Name of the course: Teoria de Circuitos. Electrotecnia

Professional category: Titular de Universidad

Type of programme: Others

Type of teaching: In person theory

Type of subject: Obligatory

University degree: Ingeniero de Minas

Course given: 2 (2001)

Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 30

Entity: Universidad de Oviedo

Department: , adscrito al departamento de INGENIERIA ELECTRICA. ELECTRONICA DE COMPUTADORES Y SISTEMAS,

City of entity: Spain

Experience supervising doctoral thesis and/or final year projects

Project title: Aportaciones al Control Directo de Potencia de Rectificadores Activos Trifásicos

Type of project: Doctoral thesis

Entity: Universidad de Oviedo

Type of entity: University

Student: Joaquín González Norniella

Obtained qualification: Apto Cum Laude y Premio Extraordinario de Doctorado de la Universidad de Oviedo (2011/2012)

Date of reading: 03/2012

European doctorate: Yes

Quality recognition: Yes

Participation in innovative teaching projects

1 Project title: Cómo hacer un examen en el ámbito de la Ingeniería: Método basado en TGs y PAs (PINN-14-025)

Type of participation: Team member

Contribution to the project: Actividades de innovación educativa

Dedication regime: Part time

Name of the main researcher: G. Norniella, Joaquín

Number of participants: 8

Amount awarded: 0 €

Funding entity: Universidad de Oviedo

Type of entity: University

Type of call: Competitive

Start-End date: 01/09/2014 - 31/08/2015

Duration: 1 year

2 Project title: Empleo de las actividades Glosario y Wiki del Campus Virtual en el desarrollo de un nuevo sistema de evaluación basado en la asignatura "Applied simulation to power systems" (Ref. PINN-13-015)

Type of participation: Team member



Contribution to the project: Actividades de innovación educativa

Dedication regime: Part time

Name of the main researcher: G. Norniella, Joaquín

Number of participants: 8

Amount awarded: 0 €

Funding entity: Universidad de Oviedo

Type of entity: University

Type of call: Competitive

Start-End date: 01/09/2013 - 31/08/2014

Duration: 1 year

3 Project title: Desarrollo de aula virtual para la mejora de la enseñanza de la asignatura de "Circuitos Eléctricos. Electrotecnia" del plan de estudios de Ingeniero de Minas (Ref. PB-06-039)

Type of participation: Principal investigator

Contribution to the project: Actividades de innovación educativa

Dedication regime: Part time

Name of the main researcher: Cano, José M.

Number of participants: 6

Amount awarded: 1.500 €

Funding entity: Universidad de Oviedo, Vicerrectorado de Calidad e Innovación

Type of call: Competitive

Start-End date: 01/09/2006 - 31/08/2007

Duration: 1 year

4 Project title: Aula virtual en las asignaturas de Electrotecnia II y Cálculo Construcción y Ensayo de Máquinas Eléctricas (Ref. PA-02-002)

Type of participation: Team member

Contribution to the project: Actividades de innovación educativa

Dedication regime: Part time

Name of the main researcher: Gonzalo A. Orcajo

Number of participants: 5

Amount awarded: 6.000 €

Funding entity: Universidad de Oviedo, Vicerrectorado de Calidad e Innovación

Type of call: Competitive

Start-End date: 01/09/2002 - 31/08/2003

Duration: 1 year

5 Project title: Innovación docente para asignaturas de Ingeniería Eléctrica en Ingeniería de Telecomunicación y Marina Civil (Ref. PB-02-034)

Type of participation: Team member

Dedication regime: Part time

Name of the main researcher: G. Melero, Manuel

Number of participants: 5

Amount awarded: 787,78 €

Funding entity: Universidad de Oviedo

Type of call: Competitive

Start-End date: 01/09/2002 - 31/08/2003

Duration: 1 year

6 Project title: Innovación docente basada en el uso de internet y tecnologías multimedia para asignaturas de Ingeniería Eléctrica (Ref. PB-01-030)

Type of participation: Team member

Contribution to the project: Actividades de Innovación docente

Dedication regime: Part time

Name of the main researcher: F. Cabanas, Manés

Number of participants: 5



Amount awarded: 2.940,33 €

Funding entity: Universidad de Oviedo, Vicerrectorado de Calidad e Innovación

Type of call: Competitive

Start-End date: 01/09/2001 - 31/08/2002

Duration: 1 year

7 Project title: Aula virtual como herramienta para la mejora de la enseñanza de la asignatura de Teoría de Circuitos Eléctricos del plan de estudio de Ingeniería Técnica en Telecomunicación (Ref. PB-05-051)

Type of participation: Team member

Contribution to the project: Actividades de innovación educativa

Dedication regime: Full time

Name of the main researcher: Carlos H. Rojas G.

Number of participants: 5

Amount awarded: 2.250 €

Funding entity: Universidad de Oviedo, Vicerrectorado de Calidad e Innovación

Type of call: Competitive

Duration: 9 months

8 Project title: Aula virtual educativa para la asignatura Fundamentos de Tecnología Eléctrica (Ref. PB-01-030)

Type of participation: Others

Contribution to the project: Actividades de innovación docente

Dedication regime: Full time

Name of the main researcher: Carlos H. Rojas G.

Number of participants: 5

Funding entity: Universidad de Oviedo, Vicerrectorado de Calidad e Innovación

Type of call: Competitive

Duration: 9 months

Other activities/achievements not included above

1 Description of the activity: Méritos docentes: 4 tramos (quinquienios) con evaluación positiva (1997-2016)

Organising entity: Universidad de Oviedo

End date: 31/12/2016

2 Description of the activity: Impartición de clases a nivel de Master (Seminario de 5 horas titulado "Distributed Generation and Power Quality") y Doctorado (Seminario de 3 horas titulado "Direct Power Control of Three-phase Active Rectifiers")

Organising entity: Universidad de Bolonia -
Dipartimento di Ingegneria dell'Energia Elettrica e
dell'Informazione "Guglielmo Marconi"

Type of entity: University

End date: 29/05/2016

3 Description of the activity: Acreditación del cumplimiento de los requisitos para impartir docencia virtual en la modalidad de "Enseñanza Online con y sin Comunicación Síncrona"

Organising entity: Universidad de Oviedo

Type of entity: University

End date: 16/03/2015

4 Description of the activity: Acreditación para impartir docencia en inglés en Grados Bilingües

Organising entity: Universidad de Oviedo

Type of entity: University

End date: 07/03/2013



- 5 Description of the activity:** Impartición de curso teórico-práctico para el acceso a las plazas 264 y 265 de Técnico Especialista en Laboratorio Grupo III - Departamento de Ingeniería Eléctrica, Electrónica de Computadores y Sistemas

Organising entity: Universidad de Oviedo

Type of entity: University

End date: 18/02/2008

Scientific and technological experience

Research and development groups/teams

- 1 Name of the group:** IEEE Task Force on Dynamic Average Modeling
Name of principal investigator: Jatskevich, Juri **Number of members in the group:** 20
Type of collaboration: Co-authorship of publications
Affiliation entity: Working Group on Modelling and Analysis of System Transients Using Digital Programs **Type of entity:** Associations and Groups
Start date: 2012
- 2 Name of the group:** Grupo de Investigación en el Diagnóstico de Máquinas e Instalaciones Eléctricas (DIMIE)
Aims of the group: Grupo de Investigación Consolidado
Number of members in the group: 8
Affiliation entity: Universidad de Oviedo **Type of entity:** University
Relevant results: Acreditado por la Agencia Nacional de Evaluación y Prospectiva (ANEP) 29/09/2011
Start date: 1996

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1 Name of the project:** Desarrollo de marco flexible y autónomo para la aplicación de controladores de flujo de cargas en anillo a redes radiales de distribución de cliente en entornos industriales
Degree of contribution: Coordinator of total project, network or consortium
Entity where project took place: Universidad de Oviedo **Type of entity:** University
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 4
Funding entity or bodies: Ministerio de Economía y Competitividad
Name of the programme: Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad
Code according to the funding entity: ENE2014-52272-R
Start-End date: 01/01/2015 - 31/12/2017 **Duration:** 3 years
Total amount: 246.840 €
- 2 Name of the project:** Sistema híbrido de compensación de potencia reactiva para aplicaciones de baja tensión
Geographical area: Regional
Degree of contribution: Coordinator of total project, network or consortium



Entity where project took place: Universidad de Oviedo **Type of entity:** University

Name principal investigator (PI, Co-PI....): Cano, José M.

Nº of researchers: 8

Funding entity or bodies:

Instituto Universitario de Tecnología Industrial de Asturias (IUTA) **Type of entity:** University Research Institute

City funding entity: Gijón, Principality of Asturias, Spain

Code according to the funding entity: SV-15-GIJON-1-12

Start-End date: 01/01/2015 - 31/12/2015 **Duration:** 1 year

Total amount: 3.000 €

3 Name of the project: Simulador de red regenerativo

Degree of contribution: Coordinator of total project, network or consortium

Entity where project took place: Universidad de Oviedo **Type of entity:** University

Name principal investigator (PI, Co-PI....): Cano, José M.

Nº of researchers: 20

Funding entity or bodies:

Ministerio de Economía y Competitividad

Name of the programme: Subprograma Estatal de Infraestructuras Científicas y Técnicas, y Equipamiento

Code according to the funding entity: UNOV13-2E-2519

Start-End date: 01/01/2013 - 31/12/2015 **Duration:** 3 years

Total amount: 55.472,03 €

4 Name of the project: Sistema de detección y localización de cortocircuitos en redes eléctricas de distribución mediante técnicas basadas en el análisis del vector de Park de tensiones

Geographical area: Regional

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 4

Funding entity or bodies:

Consejería de Economía y Empleo del Principado de Asturias

Code according to the funding entity: SV-PA-13-ECOEMP-52

Start-End date: 01/04/2013 - 31/12/2013 **Duration:** 9 months

Total amount: 11.649,6 €

Relevant results: Actividades de I+D

5 Name of the project: Minimising energy loss in hot rolling by intelligent manufacturing

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): Briz, Fernando

Nº of researchers: 11

Funding entity or bodies:

European Commission

Name of the programme: Research Fund for Coal and Steel (RFCS)

Code according to the funding entity: UE-10-RFSR-CT-2010-00008

Start-End date: 01/07/2010 - 31/12/2013 **Duration:** 3 years - 6 months



Participating entity/entities: ArcelorMittal España S.A.; BFI - VDEh-Betriebsforschungsinstitut GmbH (Alemania); CRM - Centre de Recherches Metallurgiques ASBL (Bélgica); Universidad de Oviedo

Total amount: 1.886.437 €

Sub-project amount: 302.001,43 €

6 Name of the project: Monitorización de señales en motores eléctricos eficientes

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): Manuel G. Melero

Nº of researchers: 7

Funding entity or bodies:

Ministerio de Educación y Ciencia

Ministerio de Educación, Cultura y Deporte

Code according to the funding entity: MEC-11-FP2011

Start-End date: 01/11/2011 - 10/10/2012

Duration: 1 year

Total amount: 29.263 €

7 Name of the project: Calidad de la onda de tensión. Medida y análisis de las perturbaciones electromagnéticas. Filtros y otras medidas correctoras

Degree of contribution: Coordinator of total project, network or consortium

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): Cano, José M.

Nº of researchers: 5

Funding entity or bodies:

Ministerio de Educación, Cultura y Deporte

Name of the programme: Plan Nacional de Investigación

Code according to the funding entity: MEC-07-ENE2007-68032-C04-03

Start-End date: 01/10/2007 - 30/09/2010

Duration: 3 years

Participating entity/entities: Universidad de Cantabria; Universidad de Oviedo; Universidad de Sevilla; Universidade de Vigo

Total amount: 139.150 €

8 Name of the project: Sistemas pasivos no convencionales para la mejora de la calidad de onda en entornos industriales.

Degree of contribution: Coordinator of total project, network or consortium

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): Cano, José M.

Nº of researchers: 5

Funding entity or bodies:

Ministerio de Educación y Ciencia

Code according to the funding entity: MEC-06-ENE2006-07014

Start-End date: 01/10/2006 - 30/09/2007

Duration: 1 year

Total amount: 7.260 €

Relevant results: Coordinador del proyecto total, red o consorcio

9 Name of the project: Calidad de onda y ahorro energético. Influencia de las perturbaciones en las instalaciones industriales. Minimización de sus efectos

Degree of contribution: Coordinator of total project, network or consortium

Entity where project took place: Universidad de Oviedo **Type of entity:** University

Name principal investigator (PI, Co-PI....): Cano, José M.



Nº of researchers: 5

Funding entity or bodies:

Ministerio de Ciencia y Tecnología

Name of the programme: Plan Nacional de I+D+I

Code according to the funding entity: MCT-02-DPI04416-C0403

Start-End date: 01/12/2002 - 30/11/2005

Duration: 3 years

Participating entity/entities: Universidad de Cantabria; Universidad de Oviedo; Universidad de Sevilla; Universidade de Vigo

Total amount: 32.790 €

10 Name of the project: Detección de cortocircuitos entre espiras en el estator de motores de inducción de media y baja tensión en funcionamiento alimentados por convertidores.

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 5

Funding entity or bodies:

Comisión Interministerial de Ciencia y Tecnología (CICYT)

Name of the programme: Plan Nacional de I+D+I

Code according to the funding entity: MCT-02-DPI-03628

Start-End date: 01/12/2002 - 30/11/2005

Duration: 3 years

Total amount: 27.710 €

11 Name of the project: Modelado y simulación de sistemas eléctricos de potencia para el estudio de la transmisión de huecos de tensión

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 5

Funding entity or bodies:

Gobierno del Principado de Asturias

Type of entity: Body, others

City funding entity: Spain

Name of the programme: Plan Regional de I+D+I

Code according to the funding entity: PB02-065

Start-End date: 01/06/2003 - 30/11/2004

Duration: 1 year - 5 months

Total amount: 20.048 €

12 Name of the project: Mecanismo de fallo y deterioro de los materiales aislantes eléctricos y su relación con las descargas parciales

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo

Name principal investigator (PI, Co-PI....): Goyarrola, Santiago

Nº of researchers: 18

Funding entity or bodies:

Comisión Interministerial de Ciencia y Tecnología (CICYT)

Name of the programme: Plan Nacional de I+D+I (modalidad P4)

Code according to the funding entity: MCT-00-MAT-0134-P407

Start-End date: 07/11/2001 - 06/11/2003

Duration: 2 years

Participating entity/entities: Epoxsima, S.A.; Fundación Labein; Iberdrola, S.A.; Industrias de Aparallaje Eléctrico S.A. (Inael); Universidad Politécnica de Valencia; Universidad de Oviedo; Universidad de Sevilla



Total amount: 180.303,63 €

Sub-project amount: 21.035,42 €

- 13** **Name of the project:** Desarrollo de nuevos métodos de bajo coste para la detección en tiempo real de fallos incipientes en transformadores de potencia.
Degree of contribution: Researcher
Entity where project took place: Universidad de Oviedo **Type of entity:** University
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 4
Funding entity or bodies: Gobierno de Principado de Asturias
Name of the programme: Plan Regional de I+D+I
Code according to the funding entity: FC-01-PB-TBI-11
Start-End date: 01/09/2001 - 31/08/2003 **Duration:** 2 years
Total amount: 34.417,56 €
- 14** **Name of the project:** Estudio teórico-experimental de la influencia de la presencia de desequilibrios en la tensión de alimentación sobre la generación de armónicos de corriente no característicos en accionamientos de velocidad variable del tipo PWM.
Degree of contribution: Coordinator of total project, network or consortium
Entity where project took place: Universidad de Oviedo
Name principal investigator (PI, Co-PI....): Cano, José M.
Nº of researchers: 4
Funding entity or bodies: Gobierno del Principado de Asturias **Type of entity:** Body, others
Name of the programme: Plan Regional de I+D+I
Code according to the funding entity: FC-01-PB-TBI-13
Start-End date: 01/09/2001 - 28/02/2003 **Duration:** 1 year - 6 months
Total amount: 18.755,78 €
- 15** **Name of the project:** Desarrollo de nuevos ensayos para la mejora del diagnóstico de asimetrías rotóricas en motores asíncronos de jaula de ardilla en funcionamiento.
Degree of contribution: Researcher
Entity where project took place: Universidad de Oviedo
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 5
Funding entity or bodies: Ministerio de Ciencia y Tecnología
Name of the programme: Plan Nacional de I+D+I
Code according to the funding entity: MCT-00-DPI-0609
Start-End date: 28/12/2000 - 27/12/2002 **Duration:** 2 years
Total amount: 8.935,85 €
- 16** **Name of the project:** Estudio de los armónicos no teóricos asociados a las corrientes de alimentación de motores de CC y de inducción bajo diferentes condiciones de funcionamiento
Degree of contribution: Researcher
Entity where project took place: Universidad de Oviedo
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 5
Funding entity or bodies:



FICYT – Gobierno del Principado de Asturias

Name of the programme: Plan Regional de Investigación

Code according to the funding entity: PA-TDI99-04

Start-End date: 01/12/1999 - 30/06/2001

Duration: 1 year - 7 months

Total amount: 15.962,88 €

- 17 Name of the project:** Procesamiento de descargas parciales para la detección de fallos de aislamiento en motores de media tensión y análisis del envejecimiento de los aislantes mica-epoxy mediante modelos de elementos finitos, ensayos eléctricos, térmicos y medioambientales

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo **Type of entity:** University

Name principal investigator (PI, Co-PI....): F. Cabanas, Manés

Nº of researchers: 9

Funding entity or bodies:

ABB Service

Ministerio de Educación y Cultura (DGESC)

Name of the programme: Fondos Feder - Plan Nacional De I+D

Code according to the funding entity: 1FD97-0567.

Start-End date: 01/07/1999 - 28/02/2000

Duration: 8 months

Total amount: 196.170,35 €

Relevant results: Actividades de I+D

- 18 Name of the project:** Análisis por elementos finitos del flujo axial de dispersión y de los esfuerzos mecánicos en los devanados de motores de inducción de baja y media tensión: Aplicación a la detección de fallos incipientes y valoración de su vida útil

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo **Type of entity:** University

Name principal investigator (PI, Co-PI....): F. Cabanas, Manés

Nº of researchers: 4

Funding entity or bodies:

Gobierno del Principado de Asturias

Type of entity: Body, others

City funding entity: Spain

Name of the programme: Plan Regional de Investigación

Code according to the funding entity: FC-98-PB-TDI98-03

Start-End date: 01/09/1998 - 31/12/1999

Duration: 1 year - 4 months

Total amount: 31.799,55 €

- 19 Name of the project:** Análisis de la vida útil de los motores de inducción mediante ensayos de envejecimiento acelerado

Degree of contribution: Researcher

Entity where project took place: Universidad de Oviedo **Type of entity:** University

Name principal investigator (PI, Co-PI....): F. Cabanas, Manés

Nº of researchers: 7

Funding entity or bodies:

Comisión Interministerial de Ciencia y Tecnología (CICYT)

Name of the programme: Plan Nacional de I+D



Code according to the funding entity: CC-97-TAP-1108
Start-End date: 01/08/1997 - 31/07/1999 **Duration:** 2 years
Total amount: 34.281,73 €

- 20** **Name of the project:** Modelling of induction machines for monitoring and diagnostics
Degree of contribution: Researcher
Entity where project took place: Universidad de Oviedo
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 8
Funding entity or bodies:
 European Commission
- Name of the programme:** Programa TMR
Code according to the funding entity: UE-97-ERBFMBICT97202
Start-End date: 20/06/1997 - 19/06/1998 **Duration:** 1 year
Participating entity/entities: Universidad de Oviedo; Université de Picardie Jules Verne (UPJV)
Total amount: 51.135 €

R&D non-competitive contracts, agreements or projects with public or private entities

- 1** **Name of the project:** Evaluación técnica del proyecto (Informe de ejecución 2013): DIBADIS12 - Desarrollo de protección diferencial de barras distribuida (Ref. 2000/0931/PIDI/07) (Ref. FUO-EM-245-15)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.
Nº of researchers: 1
Participating entity/entities: AENOR; Universidad de Oviedo
Funding entity or bodies:
 AENOR **Type of entity:** Associations and Groups
City funding entity: Madrid, Spain
Start date: 07/09/2015 **Duration:** 24 days
Total amount: 400 €
- 2** **Name of the project:** Caracterización y análisis de un accionamiento LCI para motor síncrono de media tensión (Ref. FUO-EM-119-15)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: CESINEL - Compañía Española de Instrumentos Eléctricos, S.L.; Universidad de Oviedo
Funding entity or bodies:
 CESINEL - Compañía Española de Instrumentos Eléctricos, S.L.
Start date: 17/03/2015 **Duration:** 3 months
Total amount: 1.528 €
- 3** **Name of the project:** Análisis de estabilizador de tensión basado en la actuación de un autotransformador bajo diferentes condiciones de carga y alimentación (Ref. FUO-EM-352-14)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 8



Participating entity/entities: CESINEL S.L.; Gestión e Innovación en Eficiencia Energética S.L.; Universidad de Oviedo

Funding entity or bodies:

Gestión e Innovación en Eficiencia Energética S.L.

Start date: 24/11/2014

Duration: 3 months

Total amount: 5.800 €

4 Name of the project: Medida de conductividad de muestras de aluminio (Ref. FUO-EM-285-14)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

N° of researchers: 7

Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo

Funding entity or bodies:

KLK Electro Materiales, S.L.U.

Type of entity: Business

Start date: 29/07/2014

Duration: 1 year

Total amount: 1.500 €

5 Name of the project: Supervisión del proceso de evaluación técnica del proyecto: 1801 CTA 747 SHARE - Sistema híbrido de almacenamiento para redes eléctricas (Ref. FUO-EM-168-14)

Degree of contribution: Coordinator of total project, network or consortium

Name principal investigator (PI, Co-PI....): Cano, José M.

N° of researchers: 1

Participating entity/entities: AENOR; Universidad de Oviedo

Funding entity or bodies:

AENOR

Type of entity: Associations and Groups

City funding entity: Madrid, Spain

Start date: 26/05/2014

Duration: 10 days

Total amount: 150 €

6 Name of the project: Evaluación de Contenido y 1ª Ejecución del ejercicio 2012 del proyecto 238.109 de la empresa (ABB) Asea Brown Boveri, S.A., titulado "Desarrollo de sistema de control completo para grandes subestaciones eléctricas con regulación por comunicaciones", actuando como Experto Técnico. (Ref. FUO-EM-058-14)

Degree of contribution: Coordinator of total project, network or consortium

Name principal investigator (PI, Co-PI....): Cano, José M.

N° of researchers: 1

Participating entity/entities: EQA; Universidad de Oviedo

Funding entity or bodies:

EQA

Start date: 02/01/2014

Duration: 364 days

Total amount: 750 €

7 Name of the project: Análisis de la distorsión armónica en la factoría de ArcelorMittal en Tubarao (Brasil) bajo distintas condiciones de operación del sistema de filtrado y diferentes estrategias de laminación (Ref. FUO-EM-310-13)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

N° of researchers: 8

Participating entity/entities: ArcelorMittal España, S.A.; ArcelorMittal Tubarao; Universidad de Oviedo

Funding entity or bodies:



ArcelorMittal España, S.A.

Type of entity: Business**Start date:** 05/10/2013**Duration:** 8 months - 26 days**Total amount:** 18.600 €

- 8 Name of the project:** Evaluación técnica del proyecto (Informe de contenido y ejecución 2012): DIBADIS12 - Desarrollo de protección diferencial de barras distribuida (Ref. 2000/0931/PIDI/07) (Ref. FUE-EM-108-13)

Degree of contribution: Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Cano, José M.**Nº of researchers:** 1**Participating entity/entities:** AENOR; Universidad de Oviedo**Funding entity or bodies:**

AENOR

Type of entity: Associations and Groups**City funding entity:** Madrid, Spain**Start date:** 23/09/2013**Duration:** 10 days**Total amount:** 600 €

- 9 Name of the project:** La conductividad de muestras de aluminio (Ref. FUE-EM-288-13)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI....):** A. Orcajo, Gonzalo**Nº of researchers:** 7**Participating entity/entities:** KLK Electro Materiales, S.L.U.; Universidad de Oviedo**Funding entity or bodies:**

KLK Electro Materiales, S.L.U.

Type of entity: Business**Start date:** 30/07/2013**Duration:** 15 days**Total amount:** 600 €

- 10 Name of the project:** Equipos de compensación de energía reactiva altamente eficientes (Ref. FUE-EM-140-13)

Degree of contribution: Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Cano, José M.; A. Orcajo, Gonzalo**Nº of researchers:** 7**Participating entity/entities:** Efibat Servicios Técnicos S.A.; Universidad de Oviedo**Funding entity or bodies:**

Efibat Servicios Técnicos S.A.

Type of entity: Business**Start date:** 01/04/2013**Duration:** 8 months**Total amount:** 6.500 €

- 11 Name of the project:** Supervisión del proceso de evaluación técnica del proyecto: Teka IDi Inducción 2011 (Ref. 2012/0529/PIDI/01) (Ref. FUE-EM-108-13)

Degree of contribution: Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Cano, José M.**Nº of researchers:** 1**Participating entity/entities:** AENOR; Universidad de Oviedo**Funding entity or bodies:**

AENOR

Type of entity: Associations and Groups**City funding entity:** Madrid, Spain**Start date:** 06/03/2013**Duration:** 10 days**Total amount:** 150 €



- 12** **Name of the project:** Ensayo de continuidad eléctrica en muestras de aluminio y cobre (Ref. FUO-EM-058-13)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo
Funding entity or bodies:
KLK Electro Materiales, S.L.U. **Type of entity:** Business
Start date: 26/01/2013 **Duration:** 15 days
Total amount: 900 €
- 13** **Name of the project:** Impartición del curso "Simulación y medida en accionamientos de motores de corriente alterna" (Ref. FUO-EM-228-12) - 20 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel; A. Orcajo, Gonzalo
Nº of researchers: 8
Participating entity/entities: CIFP La Laboral: Centro Integrado de Formación Profesional de los Sectores Industriales y de Servicios; Universidad de Oviedo
Funding entity or bodies:
CIFP La Laboral: Centro Integrado de Formación Profesional de los Sectores Industriales y de Servicios
Start date: 21/05/2012 **Duration:** 4 days
Total amount: 2.940 €
- 14** **Name of the project:** Impartición del curso "Simulación y medida en accionamientos de motores de corriente alterna" (Ref. FUO-EM-230-12) - 20 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel; A. Orcajo, Gonzalo
Nº of researchers: 8
Participating entity/entities: Fundación EIFOR; Universidad de Oviedo
Funding entity or bodies:
Fundación EIFOR
Start date: 21/05/2012 **Duration:** 4 days
Total amount: 1.960 €
- 15** **Name of the project:** Impartición del curso "Simulación y medida en accionamientos de motores de corriente alterna" (Ref. FUO-EM-235-12) - 20 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel; A. Orcajo, Gonzalo
Nº of researchers: 8
Participating entity/entities: Centro Integrado de Formación Profesional nº 1 de Santander; Universidad de Oviedo
Funding entity or bodies:
Centro Integrado de Formación Profesional nº 1 de Santander
Start date: 21/05/2012 **Duration:** 4 days
Total amount: 1.960 €
- 16** **Name of the project:** Impartición del curso "Simulación y medida en accionamientos de motores de corriente alterna" (Ref. FUO-EM-236-12) - 20 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel; A. Orcajo, Gonzalo



Nº of researchers: 8

Participating entity/entities: Instituto de Enseñanza Secundaria as Mercedes de Lugo; Universidad de Oviedo

Funding entity or bodies:

Instituto de Enseñanza Secundaria as Mercedes de Lugo

Start date: 21/05/2012

Duration: 4 days

Total amount: 980 €

17 Name of the project: Ensayos sobre el aislamiento estatórico de seis motores (Ref. FUO-EM-133-12)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 8

Participating entity/entities: Taller Eléctrico AMG S.L.; Universidad de Oviedo

Funding entity or bodies:

Taller Eléctrico AMG S.L.

Type of entity: Business

Start date: 21/03/2012

Duration: 3 days

Total amount: 184,74 €

18 Name of the project: Evaluación técnica del proyecto: Aplicación de la tecnología termográfica en las instalaciones eléctricas y vías de desarrollo de esta tecnología dentro de la consultoría energética (Ref. 068/1644) (Ref. FUO-EM-055-12)

Degree of contribution: Coordinator of total project, network or consortium

Name principal investigator (PI, Co-PI....): Cano, José M.

Nº of researchers: 1

Participating entity/entities: AENOR; Universidad de Oviedo

Funding entity or bodies:

AENOR

Type of entity: Associations and Groups

City funding entity: Madrid, Spain

Start date: 01/02/2012

Duration: 10 days

Total amount: 700 €

19 Name of the project: Impartición del curso "Simulación y medida en la monitorización de motores eléctricos" (Ref. FUO-EM-099-12) - 20 horas

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel; A. Orcajo, Gonzalo

Nº of researchers: 8

Participating entity/entities: CIFP La Laboral: Centro Integrado de Formación Profesional de los Sectores Industriales y de Servicios; Universidad de Oviedo

Funding entity or bodies:

CIFP La Laboral: Centro Integrado de Formación Profesional de los Sectores Industriales y de Servicios

Start date: 16/01/2012

Duration: 4 days

Total amount: 3.240 €

20 Name of the project: Impartición del curso "Simulación y medida en la monitorización de motores eléctricos" (Ref. FUO-EM-100-12) - 20 horas

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel; A. Orcajo, Gonzalo

Nº of researchers: 8

Participating entity/entities: Instituto de Enseñanza Secundaria as Mercedes de Lugo; Universidad de Oviedo

**Funding entity or bodies:**

Instituto de Enseñanza Secundaria as Mercedes de Lugo

Start date: 16/01/2012**Duration:** 4 days**Total amount:** 1.080 €

- 21 Name of the project:** Impartición del curso "Simulación y medida en la monitorización de motores eléctricos" (Ref. FUO-EM-101-12) - 20 horas

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** G. Melero, Manuel; A. Orcajo, Gonzalo**Nº of researchers:** 8**Participating entity/entities:** Fundación EIFOR; Universidad de Oviedo**Funding entity or bodies:**

Fundación EIFOR

Start date: 16/01/2012**Duration:** 4 days**Total amount:** 2.160 €

- 22 Name of the project:** Impartición del curso "Simulación y medida en la monitorización de motores eléctricos" (Ref. FUO-EM-102-12) - 20 horas

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** G. Melero, Manuel; A. Orcajo, Gonzalo**Nº of researchers:** 8**Participating entity/entities:** Centro Integrado de Formación Profesional nº 1 de Santander; Universidad de Oviedo**Funding entity or bodies:**

Centro Integrado de Formación Profesional nº 1 de Santander

Start date: 16/01/2012**Duration:** 4 days**Total amount:** 3.240 €

- 23 Name of the project:** Ensayo de continuidad eléctrica en muestras de aluminio y cobre (Ref. FUO-EM-209-11)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** A. Orcajo, Gonzalo**Nº of researchers:** 7**Participating entity/entities:** KLK Electro Materiales, S.L.U.; Universidad de Oviedo**Funding entity or bodies:**

KLK Electro Materiales, S.L.U.

Type of entity: Business**Start date:** 21/06/2011**Duration:** 15 days**Total amount:** 1.200 €

- 24 Name of the project:** Proyecto MERO. Asesoramiento tecnológico para la mejora de las medidas eléctricas de ventiladores durante las pruebas de rodaje (Ref. FUO-EM-177-11)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** Calleja R. Antonio J.; A. Orcajo, Gonzalo**Nº of researchers:** 6**Participating entity/entities:** Talleres Zitrón, S.A.; Universidad de Oviedo**Funding entity or bodies:**

Talleres Zitrón, S.A.

Type of entity: Business**Start date:** 03/06/2011**Duration:** 2 months**Total amount:** 3.705,88 €



- 25** **Name of the project:** Análisis de la calidad del suministro eléctrico en la terminal de descarga Cabo Poriño (Ref. FUO-EM-057-11)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: Duro Felguera Plantas Industriales S.A.; Universidad de Oviedo
Funding entity or bodies:
Duro Felguera Plantas Industriales S.A. **Type of entity:** Business
Start date: 26/01/2011 **Duration:** 2 months
Total amount: 6.800 €
- 26** **Name of the project:** Detailed design of ITER representative equatorial port plug (Ref. FUO-EM-039-11)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 7
Participating entity/entities: Fusion for Energy; NRG Energy Inc.; Numerical Analysis Technologies S.L. (NATEC Ingenieros); Universidad de Oviedo
Funding entity or bodies:
Numerical Analysis Technologies S.L. (NATEC Ingenieros)
Start date: 10/01/2011 **Duration:** 7 months - 22 days
Total amount: 1.000 €
- 27** **Name of the project:** Ensayos de continuidad eléctrica en muestras de aluminio y cobre (Ref. FUO-EM-282-10)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo
Funding entity or bodies:
KLK Electro Materiales, S.L.U. **Type of entity:** Business
Start date: 13/11/2010 **Duration:** 15 days
Total amount: 450 €
- 28** **Name of the project:** Asesoramiento en la búsqueda de soluciones de alta fiabilidad y mínimo impacto en calidad de la energía en el campo de los detectores de presencia por infrarrojos pasivos (Ref. FUO-EM-397-10)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: Temper S.A.U.; Universidad de Oviedo
Funding entity or bodies:
Temper S.A.U. **Type of entity:** Business
Start date: 01/08/2010 **Duration:** 5 months
Total amount: 18.000 €
- 29** **Name of the project:** Ensayo de continuidad eléctrica en muestras de aluminio (Ref. FUO-EM-225-10)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo



Nº of researchers: 7

Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo

Funding entity or bodies:

KLK Electro Materiales, S.L.U.

Type of entity: Business

Start date: 01/07/2010

Duration: 15 days

Total amount: 450 €

30 Name of the project: MICROPOT. Diseño de un sistema que asegure la calidad del agua en áreas de difícil acceso, energéticamente autónomo y que utilice un recurso renovable (energía hidráulica) (Ref. FUO-EM-343-10)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Pedrayes G., Francisco; Santolaria M., Carlos

Nº of researchers: 9

Participating entity/entities: Sogener S.D.S.; Universidad de Oviedo

Funding entity or bodies:

Sogener S.D.S.

Start date: 30/06/2010

Duration: 6 months

Total amount: 27.000 €

31 Name of the project: Medida de conductividad eléctrica de unas muestras de material conductor de aluminio (Ref. FUO-EM-115-10)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 7

Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo

Funding entity or bodies:

KLK Electro Materiales, S.L.U.

Type of entity: Business

Start date: 27/02/2010

Duration: 15 days

Total amount: 150 €

32 Name of the project: Ensayo de continuidad eléctrica en muestras de aluminio (Ref. FUO-EM-007-10)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 7

Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo

Funding entity or bodies:

KLK Electro Materiales, S.L.U.

Type of entity: Business

Start date: 03/01/2010

Duration: 15 days

Total amount: 150 €

33 Name of the project: Ampliación del convenio de colaboración para la ejecución del proyecto en cooperación "CTEYE. Equipo de control para detección de fallos en centros de transformación urbanos" (Ref. FUO-EM-030-09)

Degree of contribution: Coordinator of total project, network or consortium

Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo

Nº of researchers: 7

Participating entity/entities: Aplicaciones de Control y Automatización, S.A.; Hidrocantábrico Distribución Eléctrica, S.A.U.; Universidad de Oviedo

Funding entity or bodies:

Aplicaciones de Control y Automatización, S.A.

Type of entity: Business



Hidrocantábrico Distribución Eléctrica, S.A.U.

Type of entity: Business

Start date: 31/12/2009

Duration: 1 year

Total amount: 0 €

34 Name of the project: Validación para la mejora energética del TBC (Ref. FUO-EM-307-09)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Briz del Blanco, Fernando

Nº of researchers: 8

Participating entity/entities: ArcelorMittal España, S.A.; Universidad de Oviedo

Funding entity or bodies:

ArcelorMittal España, S.A.

Type of entity: Business

Start date: 04/11/2009

Duration: 4 months - 27 days

Total amount: 10.000 €

35 Name of the project: Ensayo de continuidad eléctrica en muestras de aluminio (Ref. FUO-EM-189-09)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 7

Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo

Funding entity or bodies:

KLK Electro Materiales, S.L.U.

Type of entity: Business

Start date: 24/06/2009

Duration: 15 days

Total amount: 150 €

36 Name of the project: Asesoramiento en la búsqueda de soluciones de alta fiabilidad y mínimo impacto en calidad de la energía en el campo de los detectores de presencia por infrarrojos pasivos (Ref. FUO-EM-175-09)

Degree of contribution: Coordinator of total project, network or consortium

Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo

Nº of researchers: 7

Participating entity/entities: Temper S.A.U.; Universidad de Oviedo

Funding entity or bodies:

Temper S.A.U.

Type of entity: Business

Start date: 16/06/2009

Duration: 6 months - 15 days

Total amount: 18.000 €

37 Name of the project: Diagnóstico energético de la planta de Danima Ingeniería Ambiental S.A. (Ref. FUO-EM-288-09)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo; G. Melero, Manuel

Nº of researchers: 7

Participating entity/entities: Danima Ingeniería Ambiental S.A.; Oxígeno Empresarial S.L.; Universidad de Oviedo

Funding entity or bodies:

Oxígeno Empresarial S.L.

Start date: 01/05/2009

Duration: 4 months

Total amount: 2.200 €



- 38** **Name of the project:** Ampliación del convenio de colaboración para la ejecución del proyecto en cooperación "CTEYE. Equipo de control para detección de fallos en centros de transformación urbanos" (Ref. FUO-EM-030-09)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: Aplicaciones de Control y Automatización, S.A.; Hidrocantábrico Distribución Eléctrica, S.A.U.; Universidad de Oviedo
Funding entity or bodies:
Aplicaciones de Control y Automatización, S.A. **Type of entity:** Business
Hidrocantábrico Distribución Eléctrica, S.A.U. **Type of entity:** Business
Start date: 31/12/2008 **Duration:** 1 year
Total amount: 52.173,72 €
- 39** **Name of the project:** Ensayo de continuidad eléctrica en muestras de una catenaria (Ref. FUO-EM-325-08)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 7
Participating entity/entities: KLK Electro Materiales, S.L.U.; Universidad de Oviedo
Funding entity or bodies:
KLK Electro Materiales, S.L.U. **Type of entity:** Business
Start date: 28/11/2008 **Duration:** 15 days
Total amount: 150 €
- 40** **Name of the project:** Análisis de las causas del segundo fallo ocurrido en el transformador ALSTOM ATT 316038 perteneciente a las instalaciones de San Juan de Nieva de la empresa Asturiana de Zinc S.A. (Ref. FUO-EM-228-08)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 6
Participating entity/entities: ASEVASA, Asesoramiento y Valoraciones S.A.U.; Asturina de Zinc S.A.; Universidad de Oviedo
Funding entity or bodies:
ASEVASA, Asesoramiento y Valoraciones S.A.U. **Type of entity:** Business
Start date: 01/10/2008 **Duration:** 4 months
Total amount: 13.500 €
- 41** **Name of the project:** Evaluación y análisis de las causas del segundo fallo ocurrido en el transformador ALSTOM ATT 316037 perteneciente a las instalaciones de San Juan de Nieva de la empresa Asturiana de Zinc S.A. (Ref. FUO-EM-227-08)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 6
Participating entity/entities: ASEVASA, Asesoramiento y Valoraciones S.A.U.; Asturina de Zinc S.A.; Universidad de Oviedo
Funding entity or bodies:
ASEVASA, Asesoramiento y Valoraciones S.A.U. **Type of entity:** Business
Start date: 01/10/2008 **Duration:** 4 months
Total amount: 13.500 €



- 42** **Name of the project:** Diagnóstico del estado de funcionamiento de un ventilador de tiro inducido perteneciente a la Central Térmica de La Pereda de la empresa HUNOSA (Ref. FUO-EM-146-08)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 6
Participating entity/entities: Hulleras del Norte S.A.; Taller Eléctrico AMG S.L.; Universidad de Oviedo
Funding entity or bodies:
Taller Eléctrico AMG S.L. **Type of entity:** Business
Start date: 25/05/2008 **Duration:** 2 months
Total amount: 224 €
- 43** **Name of the project:** Análisis del sistema aislante de bobinas y motor de media tensión pertenecientes a la CTCC Castellón de la empresa IBERDROLA S.A. (Ref. FUO-EM-112-08)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 6
Participating entity/entities: IBERDROLA S.A.; Taller Eléctrico AMG S.L.; Universidad de Oviedo
Funding entity or bodies:
Taller Eléctrico AMG S.L. **Type of entity:** Business
Start date: 04/04/2008 **Duration:** 3 months
Total amount: 369,6 €
- 44** **Name of the project:** Prórroga del contrato "Asesoramiento en la búsqueda de soluciones comerciales para la mejora de la calidad del suministro eléctrico" (Ref. FUO-EM-327-08)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 6
Participating entity/entities: Temper S.A.U.; Universidad de Oviedo
Funding entity or bodies:
Temper S.A.U. **Type of entity:** Business
Start date: 01/01/2008 **Duration:** 1 year
Total amount: 18.000 €
- 45** **Name of the project:** Convenio de colaboración para la ejecución del proyecto en cooperación "CTEYE. Equipo de control para detección de fallos en centros de transformación urbanos" (Ref. FUO-EM-085-08)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 6
Participating entity/entities: Aplicaciones de Control y Automatización, S.A.; Hidrocantábrico Distribución Eléctrica, S.A.U.; Universidad de Oviedo
Funding entity or bodies:
Aplicaciones de Control y Automatización, S.A. **Type of entity:** Business
Hidrocantábrico Distribución Eléctrica, S.A.U. **Type of entity:** Business
Start date: 17/12/2007 **Duration:** 1 year - 13 days
Total amount: 18.304 €
- 46** **Name of the project:** Elaboración de informe técnico para el análisis de las causas de fallo del transformador ALSTOM ATT 3160318 perteneciente a las instalaciones de San Juan de Nieva de la empresa Asturiana de Zinc S.A. (Ref. FUO-EM-009-08)



Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): F. Cabanas, Manés

Nº of researchers: 6

Participating entity/entities: ASEVASA, Peritaciones e Ingeniería de Riesgos; Asturiana de Zinc S.A.; Universidad de Oviedo

Funding entity or bodies:

ASEVASA, Peritaciones e Ingeniería de Riesgos

Type of entity: Business

Start date: 10/12/2007

Duration: 4 months

Total amount: 18.000 €

47 Name of the project: Análisis y evaluación del estado del aislamiento estático de motores de inducción de media tensión (Ref. FUO-EM-253-07)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 6

Participating entity/entities: Taller Eléctrico AMG S.L.; Universidad de Oviedo

Funding entity or bodies:

Taller Eléctrico AMG S.L.

Type of entity: Business

Start date: 04/12/2007

Duration: 3 months

Total amount: 672 €

48 Name of the project: Asesoramiento en el diagnóstico del estado del aislamiento estático de motores de inducción de central térmica (Ref. FUO-EM-197-07)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 6

Participating entity/entities: Taller Eléctrico AMG S.L.; Universidad de Oviedo

Funding entity or bodies:

Taller Eléctrico AMG S.L.

Type of entity: Business

Start date: 01/06/2007

Duration: 3 months

Total amount: 672 €

49 Name of the project: Análisis de motores de inducción para el accionamiento de pasarelas de embarque en aeronaves (Ref. FUO-EM-273-07)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 6

Participating entity/entities: ThyssenKrupp Elevator Innovation Center; Universidad de Oviedo

Funding entity or bodies:

ThyssenKrupp Elevator Innovation Center

Type of entity: Innovation and Technology Centres

Start date: 12/04/2007

Duration: 3 months

Total amount: 1.400 €

50 Name of the project: Estudio comparativo de motores de inducción de baja tensión para accionamiento de cargas tipo escalera mecánica (Ref. FUO-EM-063-07)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Rojas, Carlos

Nº of researchers: 5

Participating entity/entities: ThyssenKrupp Norte, S.A.; Universidad de Oviedo

**Funding entity or bodies:**

ThyssenKrupp Norte, S.A.

Type of entity: Business**Start date:** 27/03/2007**Duration:** 8 months**Total amount:** 825,84 €

51 Name of the project: Prórroga del contrato "Asesoramiento en la búsqueda de soluciones comerciales para la mejora de la calidad del suministro eléctrico" (Ref. FUO-EM-243-07)

Degree of contribution: Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI...):** Cano, José M.; A. Orcajo, Gonzalo**Nº of researchers:** 6**Participating entity/entities:** Temper S.A.U.; Universidad de Oviedo**Funding entity or bodies:**

Temper S.A.U.

Type of entity: Business**Start date:** 01/01/2007**Duration:** 1 year**Total amount:** 18.000 €

52 Name of the project: Ensayo de continuidad eléctrica en bandeja tipo escalera (Ref. FUO-EM-166-06)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** A. Orcajo, Gonzalo**Nº of researchers:** 6**Participating entity/entities:** KLK Electro Materiales, S.L.U.; Universidad de Oviedo**Funding entity or bodies:**

KLK Electro Materiales, S.L.U.

Type of entity: Business**Start date:** 21/12/2006**Duration:** 10 days**Total amount:** 150 €

53 Name of the project: Análisis del proceso de fabricación de bobinas para motor multipolar de 6 kV (Ref. FUO-EM-084-06)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** G. Melero, Manuel**Nº of researchers:** 6**Participating entity/entities:** Talleres Electromecánicos Monge S.L.; Universidad de Oviedo**Funding entity or bodies:**

Talleres Electromecánicos Monge S.L.

Type of entity: Business**Start date:** 27/10/2006**Duration:** 2 months - 5 days**Total amount:** 1.800 €

54 Name of the project: Diagnóstico de bobinas para motor de 6 kV y 900 CV (Ref. FUO-EM-066-06)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI...):** G. Melero, Manuel**Nº of researchers:** 6**Participating entity/entities:** Talleres Electromecánicos Monge S.L.; Universidad de Oviedo**Funding entity or bodies:**

Talleres Electromecánicos Monge S.L.

Type of entity: Business**Start date:** 11/04/2006**Duration:** 8 months - 20 days**Total amount:** 1.518 €



- 55** **Name of the project:** Prórroga del contrato "Asesoramiento en la búsqueda de soluciones comerciales para la mejora de la calidad del suministro eléctrico" (Ref. FUO-EM-228-06)
Degree of contribution: Coordinator of total project, network or consortium
Name principal investigator (PI, Co-PI....): Cano, José M.; A. Orcajo, Gonzalo
Nº of researchers: 6
Participating entity/entities: Temper S.A.U.; Universidad de Oviedo
Funding entity or bodies:
Temper S.A.U. **Type of entity:** Business
Start date: 01/01/2006 **Duration:** 1 year
Total amount: 6.600 €
- 56** **Name of the project:** Análisis del proceso de fabricación de bobinas de un motor de 5000 V y 7000 CV mediante ensayos eléctricos (Ref. FUO-EM-013-06)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel
Nº of researchers: 6
Participating entity/entities: Talleres Electromecánicos Monge S.L.; Universidad de Oviedo
Funding entity or bodies:
Talleres Electromecánicos Monge S.L. **Type of entity:** Business
Start date: 10/12/2005 **Duration:** 15 days
Total amount: 1.424 €
- 57** **Name of the project:** Caracterización del estado del aislamiento estatórico de un motor de 6000 V y 620 CV mediante ensayos de tangente delta y de descargas parciales (Ref. FUO-EM-012-06)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel
Nº of researchers: 6
Participating entity/entities: Talleres Electromecánicos Monge S.L.; Universidad de Oviedo
Funding entity or bodies:
Talleres Electromecánicos Monge S.L. **Type of entity:** Business
Start date: 25/11/2005 **Duration:** 15 days
Total amount: 840 €
- 58** **Name of the project:** Control de calidad de fabricación de bobinas preformadas para motores de media tensión (Ref. FUO-EM-107-05)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 5
Participating entity/entities: Taller Eléctrico AMG S.L.; Universidad de Oviedo
Funding entity or bodies:
Taller Eléctrico AMG S.L. **Type of entity:** Business
Start date: 27/04/2005 **Duration:** 1 month
Total amount: 369,6 €
- 59** **Name of the project:** Ensayos sobre el aislante de motores de media tensión perteneciente a la Central Térmica Soto de Ribera de la empresa Hidroeléctrica del Cantábrico S.A. (Ref. FUO-EM-066-05)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 5



Participating entity/entities: Hidroeléctrica del Cantábrico S.A.; Taller Eléctrico AMG S.L.; Universidad de Oviedo

Funding entity or bodies:

Taller Eléctrico AMG S.L.

Type of entity: Business

Start date: 27/04/2005

Duration: 1 month

Total amount: 672 €

60 Name of the project: Ampliación de las pruebas experimentales y de validación de prototipos. (Ref. FUO-EM-017-04 - Addenda)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): F. Cabanas, Manés

Nº of researchers: 5

Participating entity/entities: TSK Electrónica y Electricidad S.A; Universidad de Oviedo

Funding entity or bodies:

TSK Electrónica y Electricidad S.A

Type of entity: Business

Start date: 01/01/2005

Duration: 3 months

Total amount: 15.000 €

61 Name of the project: Impartición para Cementos Alfa S.L. del curso: "Aspectos constructivos y de funcionamiento relacionados con el diagnóstico y mantenimiento de máquinas eléctricas rotativas" (Ref. FUO-EM-098-04) - 12 horas

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 5

Participating entity/entities: Cementos Alfa S.A.; Equilibrados Dinámicos S.L.; Universidad de Oviedo

Funding entity or bodies:

Equilibrados Dinámicos S.L.

Type of entity: Business

Start date: 23/06/2004

Duration: 2 days

Total amount: 1.024,8 €

62 Name of the project: Ensayos de diagnóstico del aislamiento estatórico en motores de 1200, 500 y 450 CV (Ref. FUO-EM-101-04)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): G. Melero, Manuel

Nº of researchers: 5

Participating entity/entities: Talleres Electromecánicos Monge S.L.; Universidad de Oviedo

Funding entity or bodies:

Talleres Electromecánicos Monge S.L.

Start date: 19/06/2004

Duration: 3 days

Total amount: 605 €

63 Name of the project: Medidas de pérdidas dieléctricas en un motor asíncrono de media tensión perteneciente a la Central Térmica de La Pereda de la empresa HUNOSA (Ref. FUO-EM-094-04)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Rojas, Carlos

Nº of researchers: 5

Participating entity/entities: Hulleras del Norte S.A. (HUNOSA); Taller Eléctrico AMG S.L.; Universidad de Oviedo

Funding entity or bodies:

Taller Eléctrico AMG S.L.

Type of entity: Business

**Start date:** 22/05/2004**Duration:** 1 month**Total amount:** 201,6 €

64 Name of the project: Impartición para ABB del curso: "Técnicas de medida de las descargas parciales para el diagnóstico del aislamiento estatórico de motores de media tensión" (Ref. FUO-EM-097-04) - 12 horas

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI....):** G. Melero, Manuel**Nº of researchers:** 5**Participating entity/entities:** ABB; Equilibrados Dinámicos S.L.; Universidad de Oviedo**Funding entity or bodies:**

Equilibrados Dinámicos S.L.

Type of entity: Business**Start date:** 13/05/2004**Duration:** 2 days**Total amount:** 1.000 €

65 Name of the project: Medidas de pérdidas dieléctricas en tres motores asíncronos de media tensión pertenecientes a la Central Térmica Soto de Ribera de la empresa Hidroeléctrica del Cantábrico S.A. (Ref. FUO-EM-080-04)

Degree of contribution: Researcher**Name principal investigator (PI, Co-PI....):** Rojas, Carlos**Nº of researchers:** 5**Participating entity/entities:** Hidroeléctrica del Cantábrico S.A.; Taller Eléctrico AMG S.L.; Universidad de Oviedo**Funding entity or bodies:**

Taller Eléctrico AMG S.L.

Type of entity: Business**Start date:** 06/05/2004**Duration:** 1 month**Total amount:** 604,8 €

66 Name of the project: Asesoramiento en la búsqueda de soluciones comerciales para la mejora de la calidad del suministro eléctrico (Ref. FUO-EM-103-04)

Degree of contribution: Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Cano, José M.; A. Orcajo, Gonzalo**Nº of researchers:** 5**Participating entity/entities:** Temper S.A.U.; Universidad de Oviedo**Funding entity or bodies:**

Temper S.A.U.

Type of entity: Business**Start date:** 01/05/2004**Duration:** 1 year - 8 months**Total amount:** 31.034,5 €

67 Name of the project: Impartición del curso: "Perturbaciones conducidas de baja frecuencia en sistemas eléctricos de potencia. Prevención y corrección." (Ref. FUO-EM-102-04) - 20 horas

Degree of contribution: Coordinator of total project, network or consortium**Name principal investigator (PI, Co-PI....):** Cano, José M.**Nº of researchers:** 5**Participating entity/entities:** Temper S.A.U.; Universidad de Oviedo**Funding entity or bodies:**

Temper S.A.U.

Type of entity: Business**Start date:** 16/04/2004**Duration:** 10 days**Total amount:** 2.800 €



- 68** **Name of the project:** Reforma de los circuitos de fuerza y mando de un sistema tipo puente grúa (Ref. FUO-EM-073-04)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 5
Participating entity/entities: Equilibrados Dinámicos S.L.; Universidad de Oviedo
Funding entity or bodies:
Equilibrados Dinámicos S.L. **Type of entity:** Business
Start date: 17/03/2004 **Duration:** 6 months
Total amount: 300 €
- 69** **Name of the project:** Ensayo de aislamiento en motores de media tensión pertenecientes a la empresa Cementos Cosmos S.A. (Ref. FUO-EM-054-04)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 5
Participating entity/entities: Cementos Cosmos S.A.; Talleres Electromecánicos Monge S.L.; Universidad de Oviedo
Funding entity or bodies:
Talleres Electromecánicos Monge S.L. **Type of entity:** Business
Start date: 19/02/2004 **Duration:** 1 month
Total amount: 520 €
- 70** **Name of the project:** I+D de sistemas de diagnóstico, supervisión y control del estado de redes, máquinas eléctricas de potencia e instalaciones eléctricas con equipo de comunicaciones. (Ref. FUO-EM-017-04)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 5
Participating entity/entities: TSK Electrónica y Electricidad S.A; Universidad de Oviedo
Funding entity or bodies:
TSK Electrónica y Electricidad S.A **Type of entity:** Business
Start date: 01/01/2004 **Duration:** 1 year
Total amount: 105.000 €
- 71** **Name of the project:** Ensayo de aislamiento en máquinas de media tensión pertenecientes a la empresa Bridgestone/Firestone (Ref. FUO-EM-007-04)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): Rojas, Carlos
Nº of researchers: 5
Participating entity/entities: Bridgestone/Firestone Hispania, S.A.; Equilibrados Dinámicos S.L.; Universidad de Oviedo
Funding entity or bodies:
Equilibrados Dinámicos S.L. **Type of entity:** Business
Start date: 27/12/2003 **Duration:** 1 month
Total amount: 300 €
- 72** **Name of the project:** Asesoramiento en la búsqueda de soluciones comerciales para la mejora de la calidad del suministro eléctrico (Ref. FUO-EM-69-03)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo



Nº of researchers: 5

Participating entity/entities: Temper S.A.; Universidad de Oviedo

Funding entity or bodies:

Temper S.A.

Start date: 16/07/2003

Duration: 8 months - 18 days

Total amount: 4.200 €

73 Name of the project: Ensayo de medida de tangente delta sobre motores de inducción de media tensión (Ref. FUO-EM-081-03)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Rojas, Carlos

Nº of researchers: 5

Participating entity/entities: Taller Eléctrico AMG S.L.; Universidad de Oviedo

Funding entity or bodies:

Taller Eléctrico AMG S.L.

Type of entity: Business

Start date: 21/05/2003

Duration: 2 days

Total amount: 448 €

74 Name of the project: Asesoría Técnica para el Mercado CE de equipos de refrigeración industrial (Ref. FUO-EM-032-03)

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): Rojas, Carlos

Nº of researchers: 5

Participating entity/entities: Trabadelo Bengoa S.L.; Universidad de Oviedo

Funding entity or bodies:

Trabadelo Bengoa S.L.

Type of entity: Business

Start date: 05/03/2003

Duration: 6 months

Total amount: 2.100 €

75 Name of the project: Impartición del curso: "Perturbaciones conducidas de baja frecuencia en sistemas eléctricos de potencia. Prevención y corrección." (Ref. FUO-EM-069-02) - 20 horas

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 5

Participating entity/entities: Phoenix Contact S.A.; Universidad de Oviedo

Funding entity or bodies:

Phoenix Contact S.A.

Type of entity: Business

Start date: 20/05/2002

Duration: 10 days

Total amount: 925 €

76 Name of the project: Impartición del curso: "Perturbaciones conducidas de baja frecuencia en sistemas eléctricos de potencia. Prevención y corrección." (Ref. FUO-EM-070-02) - 20 horas

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo

Nº of researchers: 5

Participating entity/entities: Temper S.A.; Universidad de Oviedo

Funding entity or bodies:

Temper S.A.

Type of entity: Business

Start date: 20/05/2002

Duration: 10 days



Total amount: 1.050 €

- 77** **Name of the project:** Impartición del curso: "Perturbaciones conducidas de baja frecuencia en sistemas eléctricos de potencia. Prevención y corrección." (Ref. FUO-EM-071-02) - 20 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 5
Participating entity/entities: Servicios y Finanzas Temper S.L.; Universidad de Oviedo
Funding entity or bodies:
Servicios y Finanzas Temper S.L. **Type of entity:** Business
Start date: 20/05/2002 **Duration:** 10 days
Total amount: 925 €
- 78** **Name of the project:** Comportamiento en frecuencia de la instalación eléctrica prevista para la realización de ensayos de transformadores en la empresa ABB Trafo Sur, S.A. (Ref. CN-00-086-B1)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): A. Orcajo, Gonzalo
Nº of researchers: 4
Participating entity/entities: ABB Trafo Sur, S.A.; Universidad de Oviedo
Funding entity or bodies:
ABB Trafo Sur, S.A. **Type of entity:** Business
Start date: 09/03/2000 **Duration:** 15 days
Total amount: 901,65 €
- 79** **Name of the project:** Impartición del curso "Métodos convencionales y nuevos para la monitorización y el diagnóstico de máquinas eléctricas rotativas" (Ref. CN-99-104-C1) - 24 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel
Nº of researchers: 4
Participating entity/entities: ABB Service S.A.; Universidad de Oviedo
Funding entity or bodies:
ABB Service S.A.
Start date: 07/04/1999 **Duration:** 3 days
Total amount: 1.951,16 €
- 80** **Name of the project:** Impartición del curso "Técnicas para el diagnóstico de fallos incipientes en máquinas eléctricas rotativas" (Ref. CN-98-073-C1) - 24 horas
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): G. Melero, Manuel
Nº of researchers: 4
Participating entity/entities: ABB Service S.A.; Universidad de Oviedo
Funding entity or bodies:
ABB Service S.A.
Start date: 20/02/1998 **Duration:** 3 days
Total amount: 4.631,24 €
- 81** **Name of the project:** Impartición del curso "Nuevas técnicas para el mantenimiento predictivo de máquinas eléctricas rotativas" (Ref. CN-97-146-C1) - 24 horas
Degree of contribution: Researcher



Name principal investigator (PI, Co-PI....): G. Melero, Manuel
Nº of researchers: 4
Participating entity/entities: ABB Service S.A.; Universidad de Oviedo
Funding entity or bodies:
 ABB Service S.A.
Start date: 05/09/1997 **Duration:** 3 days
Total amount: 3.702,26 €

- 82 Name of the project:** Análisis electromecánico para los sistemas de tracción eléctrica para escaleras automáticas de Thyssen Norte, S.A. (Ref. CN-97-078-B1)
Degree of contribution: Researcher
Name principal investigator (PI, Co-PI....): F. Cabanas, Manés
Nº of researchers: 5
Participating entity/entities: Thyssen Norte S.A.; Universidad de Oviedo
Funding entity or bodies:
 Thyssen Norte, S.A. **Type of entity:** Business
Start date: 24/04/1997 **Duration:** 3 months
Total amount: 5.106,2 €

Results

Industrial and intellectual property

- 1 Title registered industrial property:** Equipo y Método de Detección de Fusión de Fusibles en las Salidas de Baja Tensión en Centros de Transformación Urbanos
Type of industrial property: Patent of invention
Inventors/authors/obtainers: A. Orcajo, Gonzalo; Cano, José M.; G. Norriella, Joaquín; F. Cabanas, Manés; Rojas, Carlos H.; G. Melero, Manuel; Pedrayes G., Francisco; F. García-Jove, Nixen A.; Lastra Cueva, Miguel; Pérez López, Miguel A.; Rivas Ardisana, María; Sánchez Corrales, Carlos; Del Rosal, Pedro M.
Entity holder of rights: Hidrocantábrico Distribución Eléctrica S.A. (50%) y Aplicaciones de Control y Automatización, S.A. (50%)
Country of inscription: Spain
Date of register: 26/11/2010
Conferral date: 04/06/2013
Spanish patent: Yes **EU patent:** No
Companies: Grupo Isastur; Hidrocantábrico Distribución Eléctrica, S.A.
- 2 Title registered industrial property:** Sistema Modular de Paneles de Entrenamiento para Ingeniería Eléctrica
Type of industrial property: Utility model
Inventors/authors/obtainers: G. Melero, Manuel; A. Orcajo, Gonzalo; G. Norriella, Joaquín; F. Cabanas, Manés; Rojas, Carlos H.; Cano, José M.; Pedrayes G., Francisco
Entity holder of rights: Universidad de Oviedo
Country of inscription: Spain
Date of register: 06/05/2011
Spanish patent: Yes **EU patent:** No
Companies: Electrónica EDIMAR S.L.



- 3 Title registered industrial property:** Programa Informático KOMBISMART
Type of industrial property: Programa registrado
Inventors/authors/obtainers: Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos H.; G. Melero, Manuel; F. Cabanas, Manés; Pedrayes G., Francisco
Entity holder of rights: Universidad de Oviedo
Reference/registry code: 05/2007/51 **Nº of application:** 05/2007/51
Country of inscription: Spain
Date of register: 22/02/2007
Licences: Yes
Companies: TEMPER S.A.U.
- 4 Title registered industrial property:** Squirrel Cage Asynchronous Motor and Fault Detection Method Therefor
Type of industrial property: Patent of invention
Inventors/authors/obtainers: Pedrayes G., Francisco; Ruiz, Myriam; F. Cabanas, Manés; G. Melero, Manuel; Rojas, Carlos H.; A. Orcajo, Gonzalo; Cano, José M.
Entity holder of rights: TSK Electrónica y Electricidad – Grupo TSK
Country of inscription: Spain
Date of register: 26/10/2004
Conferral date: 11/05/2006
Spanish patent: No **EU patent:** Yes
Companies: TSK Electrónica y Electricidad – Grupo TSK
- 5 Title registered industrial property:** Aplicación de los Automatas Programables al Mantenimiento y Protección de Motores Eléctricos
Type of industrial property: Patent of invention
Inventors/authors/obtainers: G. Melero, Manuel; Rodríguez Villalba, Luis A.; F. Cabanas, Manés; A. Orcajo, Gonzalo; Pérez Vázquez, José F.; Cano, José M.
Entity holder of rights: Universidad de Oviedo
Country of inscription: Spain
Date of register: 29/07/1997
Conferral date: 01/04/1999
Spanish patent: Yes **EU patent:** No
Companies: Universidad de Oviedo

Technological results derived from specialized and transfer activities, not included in previous sections

Description: Entre los contratos celebrados con entidades privadas se han incluido la organización y/o impartición de 7 cursos a empresas. Se ruega consultar los detalles en dicho apartado.

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** A. Orcajo, Gonzalo; Rodríguez D., Josué; Ardura G., Pablo; Cano, José M.; G. Norniella, Joaquín; Llera T., Rocío; Cifrián R., Diego. Dynamic Estimation of Electrical Demand in Hot Rolling Mills. IEEE Transactions on Industry Applications. 52 - 3, pp. 2714 - 2723. (United States of America): IEEE, 02/2016. ISSN 0093-9994
DOI: 10.1109/TIA.2016.2533483
Type of production: Scientific paper
Position of signature: 4
Impact source: ISI
Impact index in year of publication: 1.901 (2015 JCR SE)
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
- 2** G. Norniella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, Manés; G. Melero, Manuel. Coupling Inductor Fault Detection and Estimation in Three-Phase Adjustable Speed Drives with Direct Power Control-based Active Front-End Rectifiers. IEEE Transactions on Industrial Electronics. 62 - 3, pp. 1955 - 1963. (United States of America): IEEE, 03/2015. ISSN 0278-0046
DOI: 10.1109/TIE.2014.2334651
Type of production: Scientific paper
Position of signature: 2
Impact source: ISI
Impact index in year of publication: 6,383 (2015 JCR SE)
Position of publication: 2
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: Yes
No. of journals in the cat.: 247
- 3** Cano, José M.; Jatskevich, Juri; G. Norniella, Joaquín; Davoudi, Ali; Wang, X.; Martinez, Juan; Mehrizi-Sani, Ali; Saeedifard, Maryam; Aliprantis, Dionysios. Dynamic Average-Value Modeling of Direct Power Controlled Active Front-End Rectifiers. IEEE Transactions on Power Delivery. 29 - 6, pp. 2458 - 2466. (United States of America): IEEE, 12/2014. ISSN 0885-8977
DOI: 10.1109/TPWRD.2014.2342240
Type of production: Scientific paper
Position of signature: 1
Impact source: ISI
Impact index in year of publication: 1,733 (2014 JCR SE)
Position of publication: 85
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 247

- 4** Atighechi, Hamid; Chiniforoosh, Sina; Jatskevich, Juri; Davoudi, Ali; Martinez, Juan; Faruque, Md Omar; Sood, Vijay; Saeedifard, Maryam; Cano, José M.; Mahseredjian, Jean; Aliprantis, Dionysios; Strunz, Kai. Dynamic Average-Value Modeling of CIGRE HVDC Benchmark System. IEEE Transactions on Power Delivery. 29 - 5, pp. 2046 - 2054. (United States of America): IEEE, 10/2014. ISSN 0885-8977
DOI: 10.1109/TPWRD.2014.2340870
Type of production: Scientific paper
Position of signature: 9
Impact source: ISI
Impact index in year of publication: 1,733 (2014 JCR SE)
Position of publication: 85
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 247
- 5** Ardura, Pablo; A. Orcajo, Gonzalo; Cano, José M.; G. Norniella, Joaquín; Pedrayes, Francisco; Briz, Fernando; F. Cabanas, Manés; G. Melero, Manuel; Rojas, Carlos; González, José R. Simulation, Power Quality Analysis and Improvements in a Hot Rolling Mill Using a STATCOM. Journal of Energy and Power Engineering. 8 - 9, pp. 1633 - 1641. (United States of America): David Publishing Company, 09/2014. ISSN 1934-7367
Type of production: Scientific paper
Position of signature: 3
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 6** Daryabak, Mehdi; Filizadeh, Shaahin; Jatskevich, Juri; Davoudi, Ali; Saeedifard, Maryam; Sood, Vijay; Martinez, Juan; Aliprantis, Dionysios; Cano, José M.; Mehrizi-Sani, Ali. Modeling of LCC-HVDC Systems Using Dynamic Phasors. IEEE Transactions on Power Delivery. 29 - 4, pp. 1989 - 1998. (United States of America): IEEE, 08/2014. ISSN 0885-8977
DOI: 10.1109/TPWRD.2014.2308431
Type of production: Scientific paper
Position of signature: 9
Impact source: ISI
Impact index in year of publication: 1,733 (2014 JCR SE)
Position of publication: 85
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 247
- 7** G. Norniella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, M.; G. Melero, M. Multiple-Switching-Tables Direct Power Control of Active Front-End Rectifiers. IET Power Electronics. 7 - 6, pp. 1578 - 1589. (United Kingdom): IET, 06/2014. ISSN 1755-4535
DOI: 10.1049/iet-pel.2013.0492
Type of production: Scientific paper
Position of signature: 2
Impact source: ISI
Impact index in year of publication: 1,683 (2014 JCR SE)
Position of publication: 113
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 247



- 8** G. Norniella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, M.; G. Melero, M. Improving the Dynamics of Virtual-Flux-Based Control of Three-Phase Active Rectifiers. IEEE Transactions on Industrial Electronics. 61 - 1, pp. 177 - 187. (United States of America): IEEE, 01/2014. ISSN 0278-0046
DOI: 10.1109/TIE.2013.2245614
Type of production: Scientific paper
Position of signature: 2
Impact source: ISI
Impact index in year of publication: 6,500 (2013 JCR SE)
Position of publication: 2
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: Yes
No. of journals in the cat.: 247
- 9** Saad, H.; Peralta, J.; Dennetière, S.; Mahseredjian, J.; Jatskevich, J.; Martínez, J. A.; Davoudi, A.; Saeedifard, M.; Sood, V.; Wang, X.; Cano, José M.; Mehrizi-Sani, Ali. Dynamic Averaged and Simplified Models for MMC-Based HVDC Transmission Systems. IEEE Transactions on Power Delivery. 28 - 3, pp. 1723 - 1730. (United States of America): IEEE, 07/2013. ISSN 0885-8977
DOI: 10.1109/TPWRD.2013.2251912
Type of production: Scientific paper
Position of signature: 11
Impact source: ISI
Impact index in year of publication: 1,657
Position of publication: 85
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 247
- 10** A. Orcajo, Gonzalo; Cano, José M.; G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; Pedrayes, Francisco; G. Norniella, Joaquín. Diagnosis of Electrical Distribution Network Short Circuits Based on Voltage Park's Vector. IEEE Transactions on Power Delivery. 27 - 4, pp. 1964 - 1972. (United States of America): IEEE, 10/2012. ISSN 0885-8977
DOI: 10.1109/TPWRD.2012.2210448
Type of production: Scientific paper
Position of signature: 2
Impact source: ISI
Impact index in year of publication: 1,519
Position of publication: 83
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 243
- 11** F. Cabanas, M.; Pedrayes, Francisco; Rojas, Carlos; G. Melero, Manuel; G. Norniella, Joaquín; A. Orcajo, Gonzalo; Cano, José M.; Nuño, Fernando; Fuentes, D. R. A New Portable, Self-Powered, and Wireless Instrument for the Early Detection of Broken Rotor Bars in Induction Motors. IEEE Transactions on Industrial Electronics. 58 - 10, pp. 4917 - 4930. (United States of America): IEEE, 10/2011. ISSN 0278-0046
DOI: 10.1109/TIE.2011.2109340
Type of production: Scientific paper
Position of signature: 7
Impact source: ISI
Impact index in year of publication: 5,160
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: Yes

**Position of publication:** 4**No. of journals in the cat.:** 245

- 12** G. Norriella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, Manés; G. Melero, Manuel. Analytic and Iterative Algorithms for Online Estimation of Coupling Inductance in Direct Power Control of Three-Phase Active Rectifiers. IEEE Transactions on Power Electronics. 26 - 11, pp. 3298 - 3307. (United States of America): 04/2011. ISSN 0885-8993

DOI: 10.1109/TPEL.2011.2142196**Type of production:** Scientific paper**Position of signature:** 2**Impact source:** ISI**Impact index in year of publication:** 4,650**Position of publication:** 7**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC**Journal in the top 25%:** Yes**No. of journals in the cat.:** 245

- 13** F. Cabanas, Manés; Pedrayes, Francisco; G. Melero, Manuel; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; G. Norriella, Joaquín. Insulation Fault Diagnosis in High Voltage Power Transformers by Means of Leakage Flux Analysis. Progress In Electromagnetics Research - PIER. 114, pp. 211 - 234. (United States of America): 03/2011. ISSN 1559-8985

DOI: 10.2528/PIER11010302**Type of production:** Scientific paper**Position of signature:** 6**Impact source:** ISI**Impact index in year of publication:** 5,298**Position of publication:** 3**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC**Journal in the top 25%:** Yes**No. of journals in the cat.:** 245

- 14** F. Cabanas, Manés; Pedrayes, Francisco; G. Melero, Manuel; Rojas, Carlos; Cano, José M.; A. Orcajo, Gonzalo; G. Norriella, Joaquín. Unambiguous Detection of Broken Bars in Asynchronous Motors by Means of a Flux Measurement-Based Procedure. IEEE Transactions on Instrumentation and Measurement. 60 - 3, pp. 891 - 899. (United States of America): IEEE, 03/2011. ISSN 0018-9456

DOI: 10.1109/TIM.2010.2062711**Type of production:** Scientific paper**Position of signature:** 5**Impact source:** ISI**Impact index in year of publication:** 1,214**Position of publication:** 106**Format:** Journal**Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee**Category:** Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC**Journal in the top 25%:** No**No. of journals in the cat.:** 245

- 15** Rojas, Carlos; G. Melero, Manuel; Cano, José M.; F. Cabanas, Manés; A. Orcajo, Gonzalo; Pedrayes, Francisco. Cálculo del Par Electromagnético. Motor de Inducción con Asimetrías Rotóricas Mediante Modelos de Elemento Finitos. EOLUS. 46, pp. 20 - 26. (Spain): Publicaciones Técnicas S. L., 11/2009. ISSN 1889-2876

Type of production: Scientific paper**Position of signature:** 3**Format:** Journal**Degree of contribution:** Author or co-author of article in journal without external admissions assessment committee



- 16** Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Pedrayes, Francisco. Analysis of the Effects Caused by Structural Asymmetries in the Performance of Three-Limb Core Three-Phase Inductive Filters. IEEE Transactions on Energy Conversion. 22 - 3, pp. 600 - 607. (United States of America): IEEE, 09/2007. ISSN 0885-8969
DOI: 10.1109/TEC.2006.888045
Type of production: Scientific paper
Position of signature: 1
Impact source: ISI
Impact index in year of publication: 1,018
Position of publication: 82
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 227
- 17** F. Cabanas, Manés; G. Melero, Manuel; Pedrayes, Francisco; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; G. Iglesias, Javier; Nuño, Fernando. A New Online Method Based on Leakage Flux Analysis for the Early Detection and Location of Insulating Failures in Power Transformers: Application to Remote Condition Monitoring. IEEE Transactions on Power Delivery. 22 - 3, pp. 1591 - 1602. (United States of America): IEEE, 07/2007. ISSN 0885-8977
DOI: 10.1109/TPWRD.2006.881620
Type of production: Scientific paper
Position of signature: 6
Impact source: ISI
Impact index in year of publication: 0,857
Position of publication: 101
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Category: Science Edition - ENGINEERING, ELECTRICAL & ELECTRONIC
Journal in the top 25%: No
No. of journals in the cat.: 227
- 18** F. Cabanas, Manés; Pedrayes, Francisco; Rojas, Carlos; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M. Flujo de Dispersión: Una Herramienta Alternativa para el Diagnóstico de Fallos de Aislamiento en Transformadores. Mantenimiento. 180, pp. 22 - 30. (Spain): Puntex S. A., 12/2004. ISSN 0214-4344
Type of production: Scientific paper
Position of signature: 6
Format: Journal
Degree of contribution: Author or co-author of article in journal without external admissions assessment committee
- 19** G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Capolino, Gérard. A.Système pour la Détection de Défauts d'Isolament dans les Moteurs à Induction. Revue Internationale de Génie Électrique. 5 - 1, pp. 49 - 61. (France): Lavoisier, 05/2002. ISSN 1295-490X
DOI: 10.3166/rige.5.49-61
Type of production: Scientific paper
Position of signature: 5
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
- 20** Cano, José M.; A. Orcajo, Gonzalo; G. Mayordomo, Julio; Asensi, Rafael; F. Cabanas, Manés; G. Melero, Manuel. New Transfer Functions for an Accurate Estimation of Harmonic Distortion in AC/DC Converters Working under Unbalanced Conditions. IEEE Transactions on Industry Applications. 37 - 2, pp. 642 - 649. (United States of America): IEEE, 03/2001. ISSN 0093-9994
DOI: 10.1109/28.913732
Type of production: Scientific paper
Position of signature: 1
Impact source: ISI
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee



Category: Science Edition - ENGINEERING,
ELECTRICAL & ELECTRONIC

Impact index in year of publication: 0,847

Position of publication: 67

No. of journals in the cat.: 200

- 21** F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; R. Faya, Francisco; Solares, Juan. Métodos no Convencionales para la Detección y Diagnóstico Precoz de Fallos en Motores Eléctricos (II). Mantenimiento. 126, pp. 11 - 22. (Spain): Puntex S. A., 07/1999. ISSN 0214-4344
Type of production: Scientific paper
Position of signature: 4
Format: Journal
Degree of contribution: Author or co-author of article in journal without external admissions assessment committee
- 22** F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; R. Faya, Francisco; Solares, Juan. Métodos no Convencionales para la Detección y Diagnóstico Precoz de Fallos en Motores Eléctricos (I). Mantenimiento. 125, pp. 5 - 15. (Spain): Puntex S. A., 06/1999. ISSN 0214-4344
Type of production: Scientific paper
Position of signature: 4
Format: Journal
Degree of contribution: Author or co-author of article in journal without external admissions assessment committee
- 23** F. Cabanas, Manés; G. Melero, Manuel; Cano, José M.; Solares, Juan. El Ensayo de Factor de Pérdidas Dieléctricas y su Aplicación al Diagnóstico de Fallos en el Aislamiento en Motores de Inducción de Media Tensión. Énfasis. 9, pp. 1 - 9. (Argentina): FLC - Editorial Austral S.A., 1999. ISSN 1667-5347
Type of production: Scientific paper
Position of signature: 3
Format: Journal
Degree of contribution: Author or co-author of article in journal without external admissions assessment committee
- 24** A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Pedrayes, Francisco; G. Norniella, Joaquín; Ardura, Pablo. Analysis of Losses Due to Voltage Sags in Industrial Processes: Influential Parameters. Power Quality. pp. 52 - 75. Newcastle upon Tyne, Northumberland and Tyne and Wear(United Kingdom): Cambridge Scholars Publishing, 09/2016. ISBN 978-1-4438-9493-7
Type of production: Book chapter
Format: Book
- 25** Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; G. Norniella, Joaquín; Pedrayes, Francisco. Newton's Method Based Modelling of Loads with a Discontinuous Conduction Mode Diode Rectifier Front End for System-Level Studies. Power Quality. pp. 320 - 339. Newcastle upon Tyne, Northumberland and Tyne and Wear(United Kingdom): Cambridge Scholars Publishing, 09/2016. ISBN 978-1-4438-9493-7
Type of production: Book chapter
Format: Book
- 26** G. Melero, Manuel; Pedrayes, Francisco; G. Norniella, Joaquín; Rojas, Carlos; F. Cabanas, Manés; A. Orcajo, Gonzalo; Cano, José M.; L. Barrera, José M. Quality Control Tests and Fault Detection in the Manufacturing Process of Form-wound Coils: A Case Study. Renewable Energy: Selected Issues. II, pp. 467 - 486. Newcastle upon Tyne, Northumberland and Tyne and Wear(United Kingdom): Cambridge Scholars Publishing, 01/2016. ISBN 978-1-4438-8377-1
Type of production: Book chapter
Format: Book
- 27** F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; Solares, Juan. Maintenance and Diagnostic Techniques for Rotating Electric Machinery. pp. 1 - 318. Barcelona, Catalonia(Spain): Marcombo Boixareu Editores, 07/1999. ISBN 84-267-1222-3
Collection: ABB Service
Type of production: Scientific book or monograph
Format: Book

**Position of signature:** 4**Degree of contribution:** Author or co-author of entire book

- 28** F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; Solares, Juan. Técnicas para el Mantenimiento y Diagnóstico de Máquinas Eléctricas Rotativas. pp. 1 - 368. Barcelona, Catalonia(Spain): Marcombo Boixareu Editores, 11/1998. ISBN 84-267-1166-9

Collection: ABB Service**Type of production:** Scientific book or monograph**Format:** Book**Position of signature:** 4**Degree of contribution:** Author or co-author of entire book

Works submitted to national or international conferences

- 1** **Title of the work:** Overcurrent Protection Response of a Hot Rolling Mill Filtering System: Analysis of the Process Conditions

Name of the conference: 2016 IEEE Industry Applications Society Annual Meeting**Type of event:** Conference**Geographical area:** Non EU International**Type of participation:** Participatory - oral communication**City of event:** Portland, OR, United States of America**Date of event:** 02/10/2016**End date:** 06/10/2016**Organising entity:** IEEE Industry Applications Society**City organizing entity:** United States of America**Publication in conference proceedings:** Yes**With external admission assessment committee:** Yes**Type of contribution:** Scientific paper

A. Orcajo, Gonzalo; Rodríguez, Josué; Cano, José M.; G. Norriella, Joaquín; Ardura, Pablo; Llera, Rocío; Cifrián, Diego. pp. 1 - 10. IEEE Xplore Digital Library,

DOI: 10.1109/IAS.2016.7731908

- 2** **Title of the work:** Improved Efficiency of Local EPS through Variable Switching Frequency Control of Distributed Resources

Name of the conference: 2016 IEEE Energy Conversion Conference and Exposition (ECCE)**Type of event:** Conference**Geographical area:** Non EU International**Type of participation:** Participatory - oral communication**City of event:** Milwaukee, WI, United States of America**Date of event:** 18/09/2016**End date:** 22/09/2016**Organising entity:** IEEE Industry Applications Society**City organizing entity:** United States of America**Publication in conference proceedings:** Yes**With external admission assessment committee:** Yes**Type of contribution:** Scientific paper

Cano, José M.; Suárez, Andrés; Navarro-Rodríguez, Ángel; García, Pablo. pp. 1 - 7. IEEE Xplore Digital Library,

- 3** **Title of the work:** Dynamic Estimation of Electrical Demand in Hot Rolling Mills

Name of the conference: 2015 IEEE Industry Applications Society Annual Meeting**Type of event:** Conference**Geographical area:** Non EU International**Type of participation:** Participatory - oral communication**City of event:** Dallas, TX, United States of America



Date of event: 18/10/2015

End date: 22/10/2015

Organising entity: IEEE Industry Applications Society

City organizing entity: United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; Rodríguez, Josué; Ardura, Pablo; Cano, José M.; G. Norriella, Joaquín; Llera, Rocío; Cifrián, Diego. pp. 1 - 9. IEEE Xplore Digital Library,

DOI: 10.1109/IAS.2015.7356891

4 Title of the work: Método MEI: Cómo Hacer un Examen en el Ámbito de la Ingeniería

Name of the conference: V Congreso de la Red Ibero-Americana de Investigación sobre la Calidad de la Educación Superior (RIAICES)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Oviedo, Spain

Date of event: 08/10/2015

End date: 10/10/2015

Organising entity: RIAICES

City organizing entity: Spain

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

G. Norriella, Joaquín; Cano, José M.; Pedrayes, Francisco; F. Cabanas, Manés. "Innovación en la Educación Superior: Desafíos y Propuestas". pp. 327 - 334. Ediciones de la Universidad de Oviedo, ISBN 978-84-16046-85-0

5 Title of the work: Application of Loop Power Flow Controllers for Power Demand Optimization at Industrial Customer Sites

Name of the conference: 2015 IEEE Power & Energy Society General Meeting

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - poster

City of event: Denver, CO, United States of America

Date of event: 26/07/2015

End date: 30/07/2015

Organising entity: IEEE Power & Energy Society

City organizing entity: United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Cano, José M.; G. Norriella, Joaquín; Rojas, Carlos; A. Orcajo, Gonzalo; Jatskevich, Juri. pp. 1 - 5. IEEE Xplore Digital Library,

DOI: 10.1109/PESGM.2015.7285766

6 Title of the work: Modeling of LCC-HVDC Systems Using Dynamic Phasors

Name of the conference: 2015 IEEE Power & Energy Society General Meeting

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Denver, CO, United States of America

Date of event: 26/07/2015

End date: 30/07/2015



Organising entity: IEEE Power & Energy Society
City organizing entity: United States of America
Publication in conference proceedings: Yes

With external admission assessment committee:
 Yes

Type of contribution: Scientific paper

Daryabak, Mehdi; Filizadeh, Shaahin; Jatskevich, Juri; Davoudi, Ali; Saeedifard, Maryam; Sood, Vijay; Martinez, Juan; Aliprantis, Dionysios; Cano, José M.; Mehrizi-Sani, Ali. pp. 1 - 5. IEEE Xplore Digital Library,

DOI: 10.1109/PESGM.2015.7285683

7 Title of the work: Multi-Resolution Modeling of Induction Furnace Systems with Line-Commutated Rectifier and Resonant Converter

Name of the conference: 2015 IEEE Power & Energy Society General Meeting

Type of event: Conference

Geographical area: Non EU International

Type of participation: 'Participatory - poster

City of event: Denver, CO, United States of America

Date of event: 26/07/2015

End date: 30/07/2015

Organising entity: IEEE Power & Energy Society

City organizing entity: United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
 Yes

Type of contribution: Scientific paper

Ebrahimi, Seyyedmilad; Atighechi, Hamid; Amiri, Navid; Jatskevich, Juri; Cano, José M. pp. 1 - 5. IEEE Xplore Digital Library,

DOI: 10.1109/PESGM.2015.7286583

8 Title of the work: Electric Motors Monitoring: An Alternative to Increase the Efficiency of Ball Mills

Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'14)

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Córdoba, Andalusia, Spain

Date of event: 08/04/2014

End date: 10/04/2014

Organising entity: AEDIE y EA4EPQ

Publication in conference proceedings: Yes

With external admission assessment committee:
 Yes

G. Melero, Manuel; Cano, José M.; G. Norniella, Joaquín; Pedrayes, Francisco; F. Cabanas, Manés; Rojas G. Carlos; A. Orcajo, Gonzalo; Aguado, José M.; Ardura, Pablo. "Renewable Energy and Power Quality Journal (RE&PQJ)". 1 - 12, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/papers-icrepq14.html>>. ISBN 978-84-616-8196-9

9 Title of the work: Power Quality Analysis and Improvements in a Hot Rolling Mill using a STATCOM

Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'14)

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Córdoba, Andalusia, Spain

Date of event: 08/04/2014

End date: 10/04/2014

Organising entity: AEDIE y EA4EPQ



Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Ardura, Pablo; A. Orcajo, Gonzalo; Cano, José M.; G. Norriella, Joaquín; Pedrayes, Francisco; Briz, Fernando; F. Cabanas, Manés; G. Melero, Manuel; Rojas, Carlos; G. Suárez, José R. "Renewable Energy and Power Quality Journal (RE&PQJ)". 1 - 12, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/papers-icrepq14.html>>. ISBN 978-84-616-8196-9

10 Title of the work: Detection of Coupling Inductor Faults in Three-Phase Adjustable Speed Drives with Direct Power Control-Based Active Front-End Rectifiers

Name of the conference: The 11th IEEE International Symposium on Diagnostics for Electric Machines, Power Electronics and Drives (SDEMPED'13)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Valencia, Spain

Date of event: 27/08/2013

End date: 30/08/2013

Organising entity: IEEE and IEEE Industrial Electronics Society

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

G. Norriella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, Manés; G. Melero, Manuel. pp. 527 - 532. IEEE Xplore Digital Library, ISBN 978-1-4799-0025-1

DOI: 10.1109/DEMPED.2013.6645765

11 Title of the work: Average-Value Modeling of Thyristor Controlled Line- Commutated Converter using Voltage and Current Source Formulations

Name of the conference: 2013 IEEE Power & Energy Society General Meeting

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Vancouver, Canada

Date of event: 21/07/2013

End date: 25/07/2013

Organising entity: IEEE Power & Energy Society

City organizing entity: United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Atighechi, Hamid; Jatskevich, Juri; Cano, José M. pp. 1 - 5. IEEE Xplore Digital Library, ISBN 978-1-4799-1303-9

DOI: 10.1109/PESMG.2013.6673005

12 Title of the work: Efficiency Estimation on DPC Active Front-End Rectifier Loads for System-Level Transient Studies

Name of the conference: 2013 IEEE Power & Energy Society General Meeting

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Vancouver, Canada

Date of event: 21/07/2013

End date: 25/07/2013

Organising entity: IEEE Power & Energy Society

City organizing entity: United States of America

Publication in conference proceedings: Yes



With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Cano, José M.; G. Norriella, Joaquín; A. Orcajo, Gonzalo; Rojas, Carlos; Atighechi, Hamid; Jatskevich, Juri. pp. 1 - 5. IEEE Xplore Digital Library, ISBN 978-1-4799-1303-9

DOI: 10.1109/PESMG.2013.6672229

13 Title of the work: New Strategies for Estimating the Coupling Inductance in Grid-Connected Direct Power Control-based Three-Phase Active Rectifiers

Name of the conference: 2013 IEEE Power & Energy Society General Meeting

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Vancouver, Canada

Date of event: 21/07/2013

End date: 25/07/2013

Organising entity: IEEE Power & Energy Society

City organizing entity: United States of America

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

G. Norriella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, Manés; G. Melero, Manuel. pp. 1 - 5. IEEE Xplore Digital Library, ISBN 978-1-4799-1303-9

DOI: 10.1109/PESMG.2013.6672432

14 Title of the work: Detection of Stator Winding Insulation Failures: On-line and Off-line Tests

Name of the conference: 2013 IEEE Workshop on Electrical Machines Design Control and Diagnosis (IEEE-WEMDCD'13)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - invited/keynote talk

Reasons for participation: Upon invitation

City of event: París, France

Date of event: 11/03/2013

End date: 12/03/2013

Organising entity: IEEE Industrial Electronics Society and the IEEE France Section

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

F. Cabanas, Manés; G. Norriella, Joaquín; G. Melero, Manuel; Rojas, Carlos; Cano, José M.; Pedrayes, Francisco; A. Orcajo, Gonzalo. pp. 210 - 219. IEEE Xplore Digital Library, ISBN 978-1-4673-5658-9

DOI: 10.1109/WEMDCD.2013.6525181

15 Title of the work: Direct Power Control of a Three-phase Active Rectifier

Name of the conference: Real-Time 2010, 3rd Annual Opal-RT International Users Conference

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: París, France

Date of event: 27/06/2010

End date: 30/06/2010

Organising entity: Opal-RT

Type of contribution: Scientific paper

G. Norriella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, Manés; G. Melero, Manuel.



- 16** **Title of the work:** Experimental Application of Leakage Flux to the Detection of Insulation Faults on Disc-type Winding Transformers
Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'10)
Geographical area: Non EU International
Type of participation: Participatory - oral communication
City of event: Granada, Andalusia, Spain
Date of event: 22/03/2010
End date: 25/03/2010
Organising entity: AEDIE y Universidad de Granada
With external admission assessment committee: Yes
F. Cabanas, Manés; G. Melero, Manuel; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Pedrayes, Francisco; G. Norriella, Joaquín; D. Rozada, S.1 - CD, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/papers-icrepq10.html>>. ISBN 978-84-613-7543-1
- 17** **Title of the work:** Optimization of Direct Power Control of Three-phase Active Rectifiers by Using Multiple Switching Tables
Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'10)
Geographical area: Non EU International
Type of participation: Participatory - oral communication
City of event: Granada, Andalusia, Spain
Date of event: 22/03/2010
End date: 25/03/2010
Organising entity: AEDIE y Universidad de Granada
With external admission assessment committee: Yes
G. Norriella, Joaquín; Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; Pedrayes, Francisco; F. Cabanas, Manés; G. Melero, Manuel. 1 - CD, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/papers-icrepq10.html>>. ISBN 978-84-613-7543-1
- 18** **Title of the work:** Detection of Insulation Faults on Disc-type Winding Transformers by Means of Leakage Flux Analysis
Name of the conference: The 7th IEEE International Symposium on Diagnostics for Electric Machines, Power Electronics and Drives (SDEMPED'09)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Córcega, France
Date of event: 31/08/2009
End date: 03/09/2009
Organising entity: IEEE and IEEE Industrial Electronics Society
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
F. Cabanas, Manés; G. Melero, Manuel; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Pedrayes, Francisco; G. Norriella, Joaquín; D. Rozada, S.pp. 1 - 6. IEEE Xplore, ISBN 978-1-4244-3441-1
DOI: 10.1109/DEMPED.2009.5292756
- 19** **Title of the work:** Analysis of Electrical Field in a 6 kV Form-wound Coil with Flat Shape Voids
Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'09)
Type of event: Conference **Geographical area:** Non EU International



Type of participation: 'Participatory - poster

City of event: Valencia, Spain

Date of event: 15/04/2009

End date: 17/04/2009

Organising entity: AEDIE y Universidad de Valencia

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; Pedrayes, Francisco. CD - 1, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/papers-icrepq09.htm>>. ISBN 978-84-612-8014-8

- 20** **Title of the work:** Application of a Dynamic Model based on a Network of Magnetically Coupled Reluctances to Rotor Fault Diagnosis in Induction Motors
Name of the conference: The 6th IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'07)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Cracovia, Poland
Date of event: 06/09/2007
End date: 08/09/2007
Organising entity: IEEE y Arsenal Research
Publication in conference proceedings: Yes
Type of contribution: Scientific paper
Pedrayes, Francisco; Rojas, Carlos; F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.1, pp. 241 - 246. IEEE Xplore, ISBN 978-1-4244-1062-0
DOI: 10.1109/DEMPED.2007.4393102
- 21** **Title of the work:** Finite Element Model for the Study of Inter-Turn Short Circuits in Induction Motors
Name of the conference: The 6th IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'07)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Cracovia, Poland
Date of event: 06/09/2007
End date: 08/09/2007
Organising entity: IEEE y Arsenal Research
Type of contribution: Scientific paper
Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; Pedrayes, Francisco. 1, pp. 415 - 419. IEEE Xplore, ISBN 978-1-4244-1062-0
DOI: 10.1109/DEMPED.2007.4393130
- 22** **Title of the work:** Low Cost Method for On-line Remote Monitoring of Power Transformers and Induction Motors
Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'07)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sevilla, Spain
Date of event: 28/03/2007
End date: 30/03/2007
Organising entity: AEDIE y Universidad de Sevilla
With external admission assessment committee: Yes



Type of contribution: Scientific paper

F. Cabanas, Manés; Pedrayes, Francisco; Rojas, Carlos; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.1 - CD, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/icrepq07-papers.htm>>. ISBN 978-84-611-4707-6

23 Title of the work: Desarrollo de Métodos para el Diagnóstico de Máquinas Eléctricas Mediante el Análisis por Elementos Finitos del Flujo Magnético

Name of the conference: XIII Seminario Anual de Automática, Electrónica Industrial e Instrumentación (SAAEI'06)

Type of event: Conference

Geographical area: National

Type of participation: Participatory - oral communication

City of event: Gijón, Spain

Date of event: 13/09/2006

End date: 15/09/2006

Organising entity: Capítulo Español de la IEEE Power Electronics Society e IEEE Industrial Electronics Society

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Pedrayes, Francisco; F. Cabanas, Manés; Rojas, Carlos; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.pp. 255 - 260. Servicio de Publicaciones de la Universidad de Oviedo, ISBN 84-8317-564-9

24 Title of the work: Modelo Dinámico de un Motor Asíncrono Basado en una Red de Reluctancias Magnéticas Acopladas

Name of the conference: XIII Seminario Anual de Automática, Electrónica Industrial e Instrumentación (SAAEI'06)

Type of event: Conference

Geographical area: National

Type of participation: Participatory - oral communication

City of event: Gijón, Spain

Date of event: 13/09/2006

End date: 15/09/2006

Organising entity: Capítulo Español de la IEEE Power Electronics Society e IEEE Industrial Electronics Society

Type of contribution: Scientific paper

Pedrayes, Francisco; Rojas, Carlos; F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.pp. 261 - 266. Servicio de Publicaciones de la Universidad de Oviedo, ISBN 84-8317-564-9

25 Title of the work: A Dynamic Model Based on a Network of Magnetically Coupled Reluctances for Asynchronous Motor Fault Analysis

Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'06)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Palma de Mallorca, Spain

Date of event: 05/04/2006

End date: 07/04/2006

Organising entity: AEDIE

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Pedrayes, Francisco; Rojas, Carlos; F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.1 - CD, pp. 1 - 6. EA4EPQ, Available on-line at: <<http://www.icrepq.com/papers-icrepq06.htm>>. ISBN 84-609-6604-6



- 26** **Title of the work:** A New On-line Method for the Early Detection of Broken Rotor Bars in Asynchronous Motors Working under Arbitrary Load Conditions
Name of the conference: IEEE Industry Applications Conference - 40th IAS Annual Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Kowloon, Hong Kong
Date of event: 02/10/2005
End date: 06/10/2005
Organising entity: IEEE Industry Applications Society
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
F. Cabanas, Manés; Pedrayes, Francisco; González, M. R.; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos. 1, pp. 662 - 669. IEEE Xplore, ISBN 0-7803-9209-4
DOI: 10.1109/IAS.2005.1518378
- 27** **Title of the work:** A New Electronic Instrument for the Early Detection of Broken Bars in Asynchronous Motors Working Under Arbitrary Load Conditions
Name of the conference: The 5th IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'05)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Viena, Austria
Date of event: 07/09/2005
End date: 09/09/2005
Organising entity: IEEE y Arsenal Research
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
F. Cabanas, Manés; Pedrayes, Francisco; R. González, M.; G. Melero, Manuel; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Nuño, Fernando. 1, pp. 29 - 34. IEEE Xplore, ISBN 978-0-7803-9124-6
DOI: 10.1109/DEMPED.2005.4662547
- 28** **Title of the work:** Accelerated Ageing Test Applied to the Early Detection of Insulation Failures in Low Voltage Induction Motors
Name of the conference: 9th Spanish-Portuguese Congress on Electrical Engineering
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Marbella, Spain
Date of event: 30/06/2005
End date: 02/07/2005
Organising entity: AEDIE, Universidad de Málaga y Universidad de Córdoba
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; Pedrayes, Francisco; A. Orcajo, Gonzalo; Cano, José M. CD, pp. 1 - 5. ISBN 84-609-5231-2
- 29** **Title of the work:** Cálculo del Par Electromagnético de un Motor de Inducción con Asimetrías Rotóricas mediante Modelos de Elementos Finitos
Name of the conference: 9th Spanish-Portuguese Congress on Electrical Engineering
Type of event: Conference **Geographical area:** European Union



Type of participation: Participatory - oral communication

City of event: Marbella, Spain

Date of event: 30/06/2005

End date: 02/07/2005

Organising entity: AEDIE, Universidad de Málaga y Universidad de Córdoba

With external admission assessment committee: Yes

Type of contribution: Scientific paper

Rojas, Carlos; G. Melero, Manuel; Cano, José M.; F. Cabanas, Manés; A. Orcajo, Gonzalo; Pedrayes, Francisco. CD, pp. 1 - 5. ISBN 84-609-5231-2

30 Title of the work: Detección de Fallos en el Aislamiento Estatórico de Motores de Inducción con Devanado de Hilo

Name of the conference: XV Reunión de Grupos de Investigación de Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Zaragoza, Spain

Date of event: 17/03/2005

End date: 18/03/2005

Organising entity: AEDIE y Universidad de Zaragoza

Type of contribution: Scientific paper

G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; Pedrayes, Francisco; A. Orcajo, Gonzalo; Cano, José M.114, pp. 1 - 10. AE4EPQ, ISBN 84-609-3235-4

31 Title of the work: Voltage Sags in Industrial Systems

Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'05)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Zaragoza, Spain

Date of event: 16/03/2005

End date: 18/03/2005

Organising entity: AEDIE y Universidad de Zaragoza

With external admission assessment committee: Yes

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Pedrayes, Francisco. 1, pp. 1 - 6. AE4EPQ, ISBN 84-609-3234-6

32 Title of the work: Influencia de las Oscilaciones de Par y de Inercia de la Carga en la Detección de la Rotura de Barras mediante el Análisis Espectral del Flujo Axial de Dispersión

Name of the conference: XIV Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Conference

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Barcelona, Spain

Date of event: 01/04/2004

End date: 02/04/2004

Organising entity: AEDIE y Universidad Politécnica de Cataluña

Type of contribution: Scientific paper

G. Melero, Manuel; Rojas, Carlos; P. Donsión, Manuel; Pedrayes, Francisco; F. Cabanas, Manés; A. Orcajo, Gonzalo; Cano, José M. CD, pp. 1 - 6. AEDIE, ISBN 84-607-9887-9



- 33** **Title of the work:** Análisis Espectral de las Componentes Simétricas de las Corrientes de Alimentación de Motores de Jaula de Ardilla como Técnica de Detección de Asimetrías Rotóricas
Name of the conference: XIV Reunión de Grupos de Investigación en Ingeniería Eléctrica
Type of event: Workshop **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Barcelona, Spain
Date of event: 01/04/2004
End date: 02/04/2004
Organising entity: AEDIE y Universidad Politécnica de Cataluña
Type of contribution: Scientific paper
Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; Pedrayes, Francisco; P. Donsión, Manuel. CD, pp. 1 - 6. AEDIE, ISBN 84-607-9887-9
- 34** **Title of the work:** Detección de Fallos Incipientes en el Sistema Aislante de Transformadores de Potencia mediante el Análisis Temporal del Flujo de Dispersión
Name of the conference: XIV Reunión de Grupos de Investigación en Ingeniería Eléctrica
Type of event: Workshop **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Barcelona, Spain
Date of event: 01/04/2004
End date: 02/04/2004
Organising entity: AEDIE y Universidad Politécnica de Cataluña
Type of contribution: Scientific paper
Pedrayes, Francisco; G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M. CD, pp. 1 - 6. ISBN 84-607-9887-9
- 35** **Title of the work:** Technical and Economical Assesment of the Effect of Voltage Sags on Adjustable Speed Drives
Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'04)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 31/03/2004
End date: 02/04/2004
Organising entity: AEDIE y Universidad Politécnica de Cataluña
With external admission assessment committee: Yes
Type of contribution: Scientific paper
Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés. 1, pp. 1 - 6. EA4EPQ, ISBN 84-607-9889-5
- 36** **Title of the work:** A New On-Line Method Based On Leakage Flux Analysis For The Early Detection Of Insulation Failures In Power Trasformers
Name of the conference: IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'03)
Type of participation: Participatory - oral communication
City of event: Atlanta, United States of America
Date of event: 24/08/2003
End date: 26/08/2003
Organising entity: IEEE & Georgia Institute of Technology
F. Cabanas, Manés; G. Melero, Manuel; Pedrayes, Francisco; A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos. 1, pp. 146 - 151. ISBN 0-7803-7838-5



DOI: 10.1109/DEMPED.2003.1234563

- 37** **Title of the work:** Study of an Induction Motor Working under Stator Winding Inter-turn Short Circuit Condition
Name of the conference: IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'03)
Type of participation: Participatory - oral communication
City of event: Atlanta, United States of America
Date of event: 24/08/2003
End date: 26/08/2003
Organising entity: IEEE & Georgia Institute of Technology
G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Solares, Juan. 1, pp. 52 - 57. ISBN 0-7803-7838-5
DOI: 10.1109/DEMPED.2003.1234546
- 38** **Title of the work:** Analysis by the FEM of the Squirrel Cage IM with Broken Rotor Bar: Influence Caused in Current Spectrum by the Variable Speed
Name of the conference: 8º Congresso Luso-Espanhol de Engenharia Electrotécnica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Vilamoura, Portugal
Date of event: 03/07/2003
End date: 05/07/2003
Organising entity: Universidad de Coimbra
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; A. Orcajo, Gonzalo; Cano, José M.; Pedrayes, Francisco. 3, pp. 6.285 - 6.290. APDEE y AEDIE, ISBN 972-8822-00-6
- 39** **Title of the work:** Behaviour of an Induction Motor Working under Stator Winding Inter-turn Short Circuit Condition
Name of the conference: 8º Congresso Luso-Espanhol de Engenharia Electrotécnica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Vilamoura, Portugal
Date of event: 03/07/2003
End date: 05/07/2003
Organising entity: Universidad de Coimbra
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
G. Melero, Manuel; Corbacho, José A.; F. Cabanas, Manés; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Solares, Juan. 3, pp. 6.261 - 6.266. APDEE y AEDIE, ISBN 972-8822-00-6
- 40** **Title of the work:** Effect of Voltage Sags on Adjustable-Speed Drives: Influence of Working Conditions
Name of the conference: 8º Congresso Luso-Espanhol de Engenharia Electrotécnica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Vilamoura, Portugal
Date of event: 03/07/2003
End date: 05/07/2003



Organising entity: Universidad de Coimbra

Publication in conference proceedings: Yes

With external admission assessment committee:

Yes

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos; F. Cabanas, Manés; G. Melero, Manuel; Zamora, Salvador. 2, pp. 4.171 - 4.176. APDEE y AEDIE, ISBN 972-8822-00-6

41 Title of the work: Estimación de Armónicos de Corriente en Accionamientos PWM en Modo de Funcionamiento Continuo

Name of the conference: 8º Congresso Luso-Espanhol de Engenharia Electrotécnica

Type of event: Conference

Geographical area: European Union

Type of participation: Participatory - oral communication

City of event: Vilamoura, Portugal

Date of event: 03/07/2003

End date: 05/07/2003

Organising entity: Universidad de Coimbra

Publication in conference proceedings: Yes

With external admission assessment committee:

Yes

Type of contribution: Scientific paper

Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Zamora, Salvador. 3, pp. 6.1 - 6.6. APDEE y AEDIE, ISBN 972-8822-00-6

42 Title of the work: Consideraciones Relativas a la Evolución Temporal de las Variables Electromagnéticas del Motor de Inducción de Tipo Jaula de Ardilla con Barras Rotas

Name of the conference: XIII Reunión de Grupos de Investigación de Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Vigo, Spain

Date of event: 10/04/2003

End date: 12/04/2003

Organising entity: AEDIE

Type of contribution: Scientific paper

Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; Zamora, Salvador; P. Donsión, Manuel. Vol. 1, pp. 1 - 8. AEDIE, ISBN 84-607-6769-8

43 Title of the work: Editor Gráfico para la Simulación de Sistemas Eléctricos de Potencia

Name of the conference: XIII Reunión de Grupos de Investigación de Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Vigo, Spain

Date of event: 10/04/2003

End date: 12/04/2003

Organising entity: AEDIE

Type of contribution: Scientific paper

Zamora, Salvador; G. Cueto, J. A.; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; Orcajo, Gonzalo A. Vol. 1, pp. 1 - 10. AEDIE, ISBN 84-607-6769-8

44 Title of the work: Estudio del Flujo Axial de un Motor de Inducción Funcionando en Condiciones Reales de Cortocircuito entre Espiras

Name of the conference: XIII Reunión de Grupos de Investigación de Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster



City of event: Vigo, Spain

Date of event: 10/04/2003

End date: 12/04/2003

Organising entity: AEDIE

Type of contribution: Scientific paper

G. Melero, Manuel; Corbacho, José A.; F. Cabanas, Manés; Rojas, Carlos; Orcajo, Gonzalo A.; Cano, José M.; Zamora, Salvador; Solares, Juan. Vol. 1, pp. 1 - 8. AEDIE, ISBN 84-607-6769-8

45 Title of the work: Revisión Bibliografía sobre el Diagnóstico de Fallos en Aislantes Sólidos de Media Tensión mediante el Análisis y Procesamiento de Descargas Parciales

Name of the conference: XIII Reunión de Grupos de Investigación de Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Vigo, Spain

Date of event: 10/04/2003

End date: 12/04/2003

Organising entity: AEDIE

Type of contribution: Scientific paper

Zamora, Salvador; F. Cabanas, Manés; G. Melero, Manuel; Orcajo, Gonzalo A.; Cano, José M.; Rojas, Carlos; Pedrayes, Francisco. Vol. 1, pp. 1 - 12. AEDIE, ISBN 84-607-6769-8

46 Title of the work: Analysis of the AC-DC Harmonic Interaction between the Power Network and Uncontrolled 6 Pulse Rectifiers Working in the Discontinuous Conduction Mode using Newton's Method

Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'03)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Vigo, Spain

Date of event: 09/04/2003

End date: 12/04/2003

Organising entity: EA4EPQ - European Association for the Development of Renewable Energies, Environment and Power Quality

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés. Vol. 1, pp. 1 - 6. EA4EPQ, ISBN 84-607-6768-X

47 Title of the work: Sequence Components Obtained by Current Spectral Analysis in DC Motor Drives Working under Abnormal Conditions

Name of the conference: International Conference on Renewable Energies and Power Quality (ICREPQ'03)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Vigo, Spain

Date of event: 09/04/2003

End date: 12/04/2003

Organising entity: EA4EPQ - European Association for the Development of Renewable Energies, Environment and Power Quality

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper



A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés. Vol. 1, pp. 1 - 5. EA4EPQ, ISBN 84-607-7173-3

48 Title of the work: Análisis en Componentes de Secuencia de las Corrientes de Alimentación de un Accionamiento Controlado para un Motor de Corriente Continua de Excitación Independiente, bajo Condiciones Anómalas de Funcionamiento

Name of the conference: XII Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Córdoba, Spain

Date of event: 19/03/2002

End date: 21/03/2002

Organising entity: Universidad de Córdoba

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; Cano, José M.; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Zamora, Salvador. Vol. 1, pp. 1 - 7. Universidad de Córdoba, ISBN 84-699-7609-5

49 Title of the work: Diagnóstico del Aislamiento Estatórico de Máquinas de Media Tensión mediante el Ensayo de Tangente de Delta

Name of the conference: XII Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Córdoba, Spain

Date of event: 19/03/2002

End date: 21/03/2002

Organising entity: Universidad de Córdoba

Type of entity: University

Type of contribution: Scientific paper

G. Melero, Manuel; F. Cabanas, Manés; Rojas, Carlos; A. Orcajo, Gonzalo; Cano, José M.; Zamora, Salvador; Solares, Juan. Vol. 1, pp. 1 - 6. Universidad de Córdoba, ISBN 84-699-7609-5

50 Title of the work: El Proceso de Mallado del Entrehierro de la Máquina Asíncrona en Modelos de Elementos Finitos y su Influencia sobre la estimación exacta de la Inducción y Par Electromagnético

Name of the conference: XII Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Córdoba, Spain

Date of event: 19/03/2002

End date: 21/03/2002

Organising entity: Universidad de Córdoba

Type of entity: University

Type of contribution: Scientific paper

Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; Zamora, Salvador. Vol. 1, pp. 1 - 7. Universidad de Córdoba, ISBN 84-699-7609-5

51 Title of the work: Interacción Alterna-Continua de Rectificadores no Controlados en Modo de Funcionamiento Discontinuo mediante la Aplicación del Método de Newton

Name of the conference: XII Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Córdoba, Spain

Date of event: 19/03/2002

End date: 21/03/2002

Organising entity: Universidad de Córdoba

Type of entity: University



Type of contribution: Scientific paper

Cano, José M.; A. Orcajo, Gonzalo; Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés. Vol. 1, pp. 1 - 9. Universidad de Córdoba, ISBN 84-699-7609-5

- 52** **Title of the work:** Estudio Teórico-experimental de los Factores Externos Capaces de Influir en el Diagnóstico de Asimetrías Rotóricas mediante el Análisis de Corrientes en el Dominio de la Frecuencia
Name of the conference: 7as Jornadas Hispano Lusas de Ingeniería Eléctrica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Leganés, Spain
Date of event: 04/07/2001
End date: 06/07/2001
Organising entity: Universidad Carlos III de Madrid y Universidad de Coimbra
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; P. Donsión, Manuel. Vol. 1, pp. 135 - 140. Universidad Carlos III de Madrid, ISBN 84-95821-01-X
- 53** **Title of the work:** Evaluación Experimental de los Nuevos Métodos de Detección de Asimetrías Rotóricas en Motores Asíncronos de Jaula de Ardilla
Name of the conference: 7as Jornadas Hispano Lusas de Ingeniería Eléctrica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Leganés, Spain
Date of event: 04/07/2001
End date: 06/07/2001
Organising entity: Universidad Carlos III de Madrid y Universidad de Coimbra
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.; A. Orcajo, Gonzalo; P. Donsión, Manuel. Vol. 1, pp. 191 - 196. Universidad Carlos III de Madrid, ISBN 84-95821-01-X
- 54** **Title of the work:** Modelo del Inversor PWM en el Dominio de la Frecuencia
Name of the conference: 7as Jornadas Hispano Lusas de Ingeniería Eléctrica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Leganés, Spain
Date of event: 04/07/2001
End date: 06/07/2001
Organising entity: Universidad Carlos III de Madrid y Universidad de Coimbra
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Cano, José M.; A. Orcajo, Gonzalo; F. Cabanas, Manés; G. Melero, Manuel; Rojas, Carlos; Sáenz, José R. Vol. 1, pp. 93 - 98. Universidad Carlos III de Madrid, ISBN 84-95821-01-X
- 55** **Title of the work:** Regulación de Potencia Reactiva en Parques Eólicos: Algoritmos de Control
Name of the conference: 7as Jornadas Hispano Lusas de Ingeniería Eléctrica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication



City of event: Leganés, Spain

Date of event: 04/07/2001

End date: 06/07/2001

Organising entity: Universidad Carlos III de Madrid y Universidad de Coimbra

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Tapia, Arantxa; Tapia, Gerardo; Ostolaza, Xabier; Cano, José M.; Durán, Mario; Durán, José L.; Criado, Raimundo; Sáenz, José R. Vol. 1, pp. 155 - 160. Universidad Carlos III de Madrid, ISBN 84-95821-01-X

56 Title of the work: A New Mathematical Procedure for the Computation of the Equivalent Inverse Sequence Impedance in Working Induction Motors

Name of the conference: IEEE Industry Applications Conference

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Roma, Italy

Date of event: 08/10/2000

End date: 12/10/2000

Organising entity: IEEE Industry Applications Society

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Henao, Humberto; Capolino, Gérard A.; Assaf, T.; F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; Briz, Fernando. Vol. 1, pp. 336 - 343. IEEE Xplore, ISBN 0-7803-6401-5

DOI: 10.1109/IAS.2000.881133

57 Title of the work: The Dispersion in the Calculation of Effective Inverse Sequence Impedance of Induction Motors: A Solution Based on the Complex Fourier Transform

Name of the conference: International Conference on Electrical Machines (ICEM'00)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Espoo, Finland

Date of event: 28/08/2000

End date: 30/08/2000

Organising entity: Helsinki University of Technology

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; Briz, Fernando; Capolino, Gérard A.; Henao, Humberto. Vol. 1, pp. 766 - 770. Helsingin Yliopisto, ISBN 95-122-5097-7

58 Title of the work: Distortion Analysis in AC-DC Rectifiers Operating in Discontinuous Mode under Unbalanced Conditions

Name of the conference: PCIM 2000 - Power Conversion and Intelligent Motion, 6th European Power Quality Conference

Type of event: Conference

Geographical area: European Union

Type of participation: Participatory - oral communication

City of event: Nuremberg, Germany

Date of event: 06/06/2000

End date: 08/06/2000

Organising entity: PCIM Europe

Publication in conference proceedings: Yes



With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Cano, José M.; A. Orcajo, Gonzalo; G. Mayordomo, Julio; F. Cabanas, Manés; G. Melero, Manuel. Vol. 1, pp. 127 - 131. PCIM, ISBN 3-928643-26-6

59 Title of the work: Análisis y Modelado de Asimetrías Rotóricas en Motores de Inducción de Jaula de Ardilla mediante el Método de los Elementos Finitos

Name of the conference: X Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Santander, Spain

Date of event: 16/03/2000

End date: 18/03/2000

Organising entity: Universidad de Cantabria

Publication in conference proceedings: Yes

Type of contribution: Scientific paper

Rojas, Carlos; G. Melero, Manuel; F. Cabanas, Manés; A. Orcajo, Gonzalo; Cano, José M.; P. Donsión, Manuel. Vol. 1, pp. 1 - 8. Universidad de Cantabria, ISBN 84-8102-248-9

60 Title of the work: Modelos en el Dominio de la Frecuencia para Cálculos de la Distorsión Armónica en Convertidores AC/DC

Name of the conference: X Reunión de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Santander, Spain

Date of event: 16/03/2000

End date: 18/03/2000

Organising entity: Universidad de Cantabria

Publication in conference proceedings: Yes

Type of contribution: Scientific paper

Cano, José M.; A. Orcajo, Gonzalo; G. Mayordomo, Julio; F. Cabanas, Manés; G. Melero, Manuel. Vol. 1, pp. 1 - 6. Universidad de Cantabria, ISBN 84-8102-248-9

61 Title of the work: An Automated Insulation Failure Detection System for Working Induction Motors

Name of the conference: 8th European Conference on Power Electronics and Applications (EPE'99)

Type of event: Conference

Geographical area: European Union

Type of participation: Participatory - oral communication

City of event: Lausanne, Switzerland

Date of event: 07/09/1999

End date: 09/09/1999

Organising entity: European Power Electronics and Drives Association

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

G. Melero, Manuel; F. Cabanas, Manés; A. Orcajo, Gonzalo; Cano, José M.; Capolino, G. A.1, pp. 1 - 8. École Polytechnique Fédérale de Lausanne, ISBN 90-75815-04-2

62 Title of the work: Analytical Calculation of Harmonic Distortion Produced by ac/dc Controlled Converters

Name of the conference: 8th European Conference on Power Electronics and Applications (EPE'99)

Type of event: Conference

Geographical area: European Union

Type of participation: Participatory - oral communication



City of event: Lausanne, Switzerland

Date of event: 07/09/1999

End date: 09/09/1999

Organising entity: European Power Electronics and Drives Association

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; F. Cabanas, Manés; Cano, José M.; G. Melero, Manuel; R. Faya, Francisco. 1, pp. 1 - 8. École Polytechnique Fédérale de Lausanne, ISBN 90-75815-04-2

63 Title of the work: TCR Based Reactive Power Compensator with Low Harmonic Injection

Name of the conference: 8th European Conference on Power Electronics and Applications (EPE'99)

Type of event: Conference

Geographical area: European Union

Type of participation: Participatory - oral communication

City of event: Lausanne, Switzerland

Date of event: 07/09/1999

End date: 09/09/1999

Organising entity: European Power Electronics and Drives Association

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

Cano, José M.; A. Orcajo, Gonzalo; F. Cabanas, Manés; G. Melero, Manuel. 1, pp. 1 - 7. École Polytechnique Fédérale de Lausanne, ISBN 90-75815-04-2

64 Title of the work: The Evaluation of Current Harmonics in the Context of Filter Design for Distribution Systems with Variable Frequency Drives

Name of the conference: 8th European Conference on Power Electronics and Applications (EPE'99)

Type of event: Conference

Geographical area: European Union

Type of participation: Participatory - poster

City of event: Lausanne, Switzerland

Date of event: 07/09/1999

End date: 09/09/1999

Organising entity: European Power Electronics and Drives Association

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; F. Cabanas, Manés; Cano, José M.; G. Melero, Manuel; Rojas, Carlos H.1, pp. 1 - 10. École Polytechnique Fédérale de Lausanne, ISBN 90-75815-04-2

65 Title of the work: A new methodology for applying the FFT to induction motor on-line diagnosis

Name of the conference: The 1999 IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'99)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Gijón, Spain

Date of event: 01/09/1999

End date: 03/09/1999

Organising entity: IEEE y Universidad de Oviedo

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper



F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; Briz, Fernando; Capolino, Gérard A.1, pp. 537 - 543. IEEE, ISBN 84-699-0977-0

- 66** **Title of the work:** New Transfer Functions for an Accurate Estimation of Harmonic Distortion in AC/DC Converters Working under Unbalanced Conditions
Name of the conference: The 1999 IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'99)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Gijón, Spain
Date of event: 01/09/1999
End date: 03/09/1999
Organising entity: IEEE y Universidad de Oviedo
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Cano, José M.; A. Orcajo, Gonzalo; G. Mayordomo, Julio; Asensi, Rafael; F. Cabanas, Manés; G. Melero, Manuel. 1, pp. 409 - 414. IEEE, ISBN 84-699-0977-0
- 67** **Title of the work:** Study of Harmonic Distortion for Induction Motor Drives Working under Abnormal Conditions
Name of the conference: The 1999 IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'99)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Gijón, Spain
Date of event: 01/09/1999
End date: 03/09/1999
Organising entity: IEEE y Universidad de Oviedo
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
A. Orcajo, Gonzalo; Cano, José M.; F. Cabanas, Manés; G. Melero, Manuel. 1, pp. 421 - 426. IEEE, ISBN 84-699-0977-0
- 68** **Title of the work:** Análisis de la Distorsión Asociada a los Accionamientos de Motores de Inducción mediante Técnicas Analíticas y de Simulación
Name of the conference: VI Jornadas Hispano-Lusas de Ingeniería Eléctrica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Lisboa, Portugal
Date of event: 07/07/1999
End date: 09/07/1999
Organising entity: Universidade Nova de Lisboa
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
A. Orcajo, Gonzalo; Cano, José M.; F. Cabanas, Manés; G. Melero, Manuel. 1, pp. 117 - 124. Edições da Universidade Nova de Lisboa - Edinova,



- 69** **Title of the work:** Compensador de Potencia Reactiva Basado en Reactancias Controladas por Tiristores con Baja Inyección de Corrientes Armónicas
Name of the conference: VI Jornadas Hispano-Lusas de Ingeniería Eléctrica
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Lisboa, Portugal
Date of event: 07/07/1999
End date: 09/07/1999
Organising entity: Universidade Nova de Lisboa
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes
Type of contribution: Scientific paper
Cano, José M.; A. Orcajo, Gonzalo; F. Cabanas, Manés; G. Melero, Manuel. 1, pp. 329 - 335. Edições da Universidade Nova de Lisboa - Edinova,
- 70** **Title of the work:** Consideraciones sobre el Diagnóstico del Aislamiento Estatórico a partir de los Ensayos Eléctricos
Name of the conference: 9ª Reunión Nacional de Grupos de Investigación en Ingeniería Eléctrica
Type of event: Workshop **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Tarrasa, Spain
Date of event: 28/01/1999
End date: 30/01/1999
Organising entity: Departamento de Ingeniería Eléctrica, Universidad Politécnica de Cataluña
Type of contribution: Scientific paper
G. Melero, Manuel; F. Cabanas, Manés; A. Orcajo, Gonzalo; Cano, José M.; Solares, Juan. "Libro de Actas". 2, pp. 47 - 52.
- 71** **Title of the work:** Sistemas para la Evaluación y el Control de la Distorsión Armónica en Plantas Industriales
Name of the conference: 9ª Reunión Nacional de Grupos de Investigación en Ingeniería Eléctrica
Type of event: Workshop **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Tarrasa, Spain
Date of event: 28/01/1999
End date: 30/01/1999
Organising entity: Departamento de Ingeniería Eléctrica, Universidad Politécnica de Cataluña
Type of contribution: Scientific paper
A. Orcajo, Gonzalo; Cano, José M.; F. Cabanas, Manés; G. Melero, Manuel; R. Faya, Francisco; Álvarez, J.M."Libro de Actas". 3, pp. 94 - 99.
- 72** **Title of the work:** Design and Construction of an Educational Prototype for the Generation of Electrical Energy in Isolated Networks by Means of a Self-excited Asynchronous Machine Controlled by PLC
Name of the conference: International Conference on Electrical Machines (ICEM'98)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Estambul, Turkey
Date of event: 02/09/1998
End date: 04/09/1998
Organising entity: Universidad Técnica de Oriente Medio y Universidad Técnica de Estambul
Publication in conference proceedings: Yes **With external admission assessment committee:** Yes



Type of contribution: Scientific paper

G. Melero, Manuel; A. Orcajo, Gonzalo; M. Latorre, Bernardo; Cano, José M.; F. Cabanas, Manés; Mateos M., Felipe. 1, pp. 651 - 656. Middle East Technical University, ISBN 97-542-9125-X

73 Title of the work: Métodos no Convencionales para la Detección y Diagnóstico Precoz de Fallos en Motores Eléctricos

Name of the conference: 8ª Reunión Nacional de Grupos de Investigación en Ingeniería Eléctrica

Type of event: Workshop

Geographical area: National

Type of participation: 'Participatory - poster

City of event: Cádiz, Spain

Date of event: 29/01/1998

End date: 31/01/1998

Organising entity: Departamento de Ingeniería Eléctrica, Universidad de Cádiz

Type of contribution: Scientific paper

F. Cabanas, Manés; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.; R. Faya, Francisco. En: Libro de Actas. 1, pp. 321 - 338. Universidad de Cádiz,

74 Title of the work: A Maintenance, Protection and Control System for Asynchronous Motors Based on PLC

Name of the conference: IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'97)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Marsella, France

Date of event: 01/09/1997

End date: 03/09/1997

Organising entity: IEEE - Power Electronics Society

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

G. Melero, Manuel; R. Villalba, L. A.; A. Orcajo, Gonzalo; F. Cabanas, Manés; Cano, José M.1, pp. 116 - 121. IEEE French Section,

75 Title of the work: A New PLC Compatible Instrument for On-line Detection of Interturn Shortcircuits in Working Induction Motors

Name of the conference: IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'97)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Marsella, France

Date of event: 01/09/1997

End date: 03/09/1997

Organising entity: IEEE - Power Electronics Society

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

F. Cabanas, Manés; Pérez, José F.; G. Melero, Manuel; A. Orcajo, Gonzalo; Cano, José M.1, pp. 27 - 33. IEEE French Section,

76 Title of the work: DC Motor Drives Behaviour under Abnormal Working Condition: A Practical Case Study

Name of the conference: IEEE International Symposium on Diagnostics for Electrical Machines, Power Electronics and Drives (SDEMPED'97)

Type of event: Conference

Geographical area: Non EU International



Type of participation: Participatory - oral communication

City of event: Marsella, France

Date of event: 01/09/1997

End date: 03/09/1997

Organising entity: IEEE - Power Electronics Society

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

A. Orcajo, Gonzalo; G. Melero, Manuel; F. Cabanas, Manés; Cano, José M.1, pp. 125 - 131. IEEE French Section,

77 Title of the work: DC Motor Educational Drive with Four Quadrant Operation and Conventional and Fuzzy Control

Name of the conference: 7th International Power Electronics & Motion Control Conference and Exhibition (PEMC'96)

Type of event: Conference

Geographical area: Non EU International

Type of participation: Participatory - oral communication

City of event: Budapest, Hungary

Date of event: 02/09/1996

End date: 04/09/1996

Organising entity: European Power Electronics & Drives Association (EPEA)

Publication in conference proceedings: Yes

With external admission assessment committee:
Yes

Type of contribution: Scientific paper

F. Cabanas, Manés; Pérez, José F.; F. Nosti, Pablo; Sanz, Miguel A.; Cano, José M.3, pp. 382 - 386. Technical University of Budapest, ISBN 96-342-0487-2

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

1 Committee title: IEEE Task Force on Dynamic Average Modeling

Primary (UNESCO code): 330609 - Transmission and distribution

Affiliation entity: Working Group on Modeling and Analysis of Systems Transients Using Digital Programs - Power and Energy Society (PES) - IEEE

Type of entity: Associations and Groups

City affiliation entity: United States of America

Start date: 07/2012

2 Committee title: Institut of Electrical and Electronics Engineers (IEEE) (Member number 40269346)

City affiliation entity: United States of America

Start date: 01/1998



Organization of R&D activities

Title of the activity: Miembro del comité local de organización de congreso de ámbito Internacional

Type of activity: The IEEE International Symposium on Diagnostics for Electrical Machines Power Electronics and Drives (IEEE SDEMPED'99)

Convening entity: IEEE

City convening entity: Gijón, Principality of Asturias, Spain

Start-End date: 01/09/1999 - 03/09/1999

R&D management

- 1** **Name of the activity:** 6th International Conference on Power Electronics Systems and Applications, PESA 2015
Type of management: Management of organised events
Performed tasks: Miembro del "PESA paper review committee"
City of entity: Hong Kong, Hong Kong
Entity: IEEE
Start date: 15/12/2015
Geographical area: Non EU International
- 2** **Name of the activity:** International Conference on Modeling and Simulation of Electrical Machines, Converters and Systems, ELECTRIMACS 2014
Type of management: Management of organised events
Performed tasks: Revisor
Entity: IEEE
Start date: 19/05/2014
Geographical area: Non EU International
- 3** **Name of the activity:** 17th IEEE Mediterranean Electrotechnical Conference, MELECON 2014
Type of management: Management of organised events
Performed tasks: Track co-chair for Power Electrical Systems on the technical program committee (TPC)
City of entity: Beirut, Lebanon
Entity: IEEE
Start date: 13/04/2014
Geographical area: Non EU International
- 4** **Name of the activity:** Programa de Doctorado Interuniversitario en Ingeniería Eléctrica y Electrónica
Type of management: Programme management
Performed tasks: Miembro de la Comisión Docente del Programa y Secretario de la misma
Entity: Universidad Politécnica de Madrid y Universidad de Oviedo
Start date: 04/03/2014
- 5** **Name of the activity:** Programa de Doctorado en Control de Procesos, Electrónica Industrial e Ingeniería Eléctrica (Mención hacia la Excelencia)
Type of management: Programme management
Performed tasks: Miembro de la Comisión de Seguimiento del Programa
Entity: Universidad de Oviedo
Start date: 28/09/2012



Evaluation and revision of R&D projects and articles

- 1** **Name of the activity:** Evaluación de propuestas en los topics "AC and DC power supplies; lithium-ion batteries; energy storage systems; energy monitoring" dentro de la línea "Industry-driven Research" del programa "Growth and Employment" de los Fondos Europeos de Cohesión Estructural (2014-2020)
Performed tasks: Evaluador de Proyectos
Entity where activity was carried out: Central Finance and Contracting Agency (CFCA), Letonia
City of entity: Riga, Latvia
Start-End date: 04/07/2016 - 01/09/2016
- 2** **Name of the activity:** Colaboración en el proceso de evaluación (7 evaluaciones)
Performed tasks: Evaluador ANEP
Entity where activity was carried out: Agencia Nacional de Evaluación y Prospectiva
Type of entity: State agency
City of entity: Madrid, Spain
Start-End date: 2006 - 2016
- 3** **Name of the activity:** Concurso Nacional de Proyectos FONDECYT Regular 2015
Performed tasks: Evaluador de Proyectos
Entity where activity was carried out: Fondo Nacional de Desarrollo Científico y Tecnológico (FONDECYT) de la Comisión Nacional de Investigación Científica y Tecnológica (CONICYT) de Chile
City of entity: Santiago de Chile, Chile
Start-End date: 21/10/2014 - 31/10/2014
- 4** **Name of the activity:** HC Ørsted Postdoc Programme cofunded by Marie Curie Actions
Performed tasks: Soporte al Comité de Selección emitiendo una segunda opinión ante la refutación del informe del Panel Internacional de Expertos por parte del candidato
Entity where activity was carried out: Universidad Técnica de Dinamarca (DTU)
City of entity: Lyngby, Denmark
Start-End date: 31/07/2014 - 06/08/2014
- 5** **Name of the activity:** Tesis Mr. Amir Fazeli: The Application of a Novel Deterministic Algorithm for Controlling the Power Flow Through Real Time Dispatch of the Available Distributed Energy Resources within a Microgrid
Performed tasks: Miembro Tribunal Evaluación de Tesis Doctoral (External examiner)
Entity where activity was carried out: Universidad de Nottingham
Type of entity: University
City of entity: Nottingham, United Kingdom
Start-End date: 28/05/2014 - 28/05/2014
- 6** **Name of the activity:** Tesis D. Manuel Barragán Villarejo: Control Activo de Flujos de Potencia en Redes de Distribución
Performed tasks: Miembro Tribunal Evaluación de Tesis Doctoral (Presidente)
Entity where activity was carried out: Universidad de Sevilla
Type of entity: University
City of entity: Sevilla, Spain
Start-End date: 23/05/2014 - 23/05/2014



- 7 Name of the activity:** Tesis Dña: Esther Torres Iglesias - Metodología para el Análisis del Comportamiento de Fusibles de Media Tensión, en Instalación Horizontal
Performed tasks: Miembro Tribunal Evaluación de Tesis Doctoral (Vocal)
Entity where activity was carried out: Universidad del País Vasco **Type of entity:** University
City of entity: Bilbao, Spain
Start-End date: 01/02/2008 - 01/02/2008

Other achievements

Stays in public or private R&D centres

- 1 Entity:** University of Bologna (ARWU-2015 201-300)
City of entity: Bologna, Emilia-Romagna, Italy
Start-End date: 22/05/2016 - 29/05/2016 **Duration:** 8 days
Goals of the stay: Guest
Provable tasks: 1. Held a Seminar within the Master (Laurea Magistrale) in Electrical Engineering - "Distributed Generation and Power Quality"; 2. Held a Seminar within the PhD program in Biomedical, Electrical, and System Engineering - "Direct Power Control of Three-phase Active Rectifiers"
- 2 Entity:** Universidad de British Columbia (ARWU-2014 37)
City of entity: Vancouver, Canada
Start-End date: 01/08/2014 - 31/10/2014 **Duration:** 3 months
Goals of the stay: Guest
- 3 Entity:** Universidad de British Columbia (ARWU-2012 39)
City of entity: Vancouver, Canada
Start-End date: 01/07/2012 - 31/12/2012 **Duration:** 6 months
Goals of the stay: Guest
- 4 Entity:** Fábrica de motores eléctricos de la empresa Bosch GmbH
City of entity: Bühl (Baden-Württemberg), Germany
Start date: 01/11/1995 **Duration:** 5 months
Funding entity: Bosch GmbH
Goals of the stay: Contracted
Relevant results: Construcción de pequeños motores eléctricos para automoción. Los trabajos fueron realizados en calidad de Praktikant a lo largo de un ciclo formativo de 5 meses, en los que estuve destinado en distintos departamentos de la empresa

Obtained grants and scholarships

- 1 Name of the grant:** Ayuda de Movilidad Docente en el Marco del Programa Erasmus + (resolución 10/11/2015)
City awarding entity: Bolonia, Italy
Aims: Post-doctoral
Awarding entity: Universidad de Oviedo **Type of entity:** University
Amount of the grant: 700 €
Conferral date: 09/05/2016 **Duration:** 8 days
End date: 28/05/2016



Entity where activity was carried out: Universidad de Bolonia

Faculty, institute or centre: Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione "Guglielmo Marconi"

- 2** **Name of the grant:** Ayuda Económica Movilidad de Excelencia para Docentes e Investigadores (convocatoria 07/03/2014)

City awarding entity: Vancouver, Canada

Aims: Post-doctoral

Awarding entity: Universidad de Oviedo

Type of entity: University

Amount of the grant: 5.100 €

Conferral date: 19/06/2014

Duration: 3 months

End date: 31/10/2014

Entity where activity was carried out: Estancia Universidad de British Columbia

Faculty, institute or centre: Electrical and Computer Engineering Department

- 3** **Name of the grant:** Estancias de Profesores e Investigadores Seniores en Centros Extranjeros 2012 (convocatoria 20/06/2012)

City awarding entity: Vancouver, Canada

Aims: Post-doctoral

Awarding entity: Ministerio de Educación Cultura y Deporte - Programa Nacional de Movilidad de Recursos Humanos en el marco del Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica 2008-2011

Amount of the grant: 12.000 €

Conferral date: 19/11/2013

Duration: 3 months

End date: 31/12/2012

Entity where activity was carried out: Estancia Universidad de British Columbia

Faculty, institute or centre: Electrical and Computer Engineering Department

- 4** **Name of the grant:** Ayuda Económica Movilidad de Excelencia para Docentes e Investigadores (convocatoria 04/01/2012)

City awarding entity: Vancouver, Canada

Aims: Post-doctoral

Awarding entity: Universidad de Oviedo

Type of entity: University

Amount of the grant: 5.620 €

Conferral date: 13/03/2012

Duration: 3 months

End date: 30/09/2012

Entity where activity was carried out: Estancia Universidad de British Columbia

Faculty, institute or centre: Electrical and Computer Engineering Department

- 5** **Name of the grant:** Beca Académica de Prácticas en la Empresa HIDROELÉCTRICA DEL CANTÁBRICO, S.A.

City awarding entity: Oviedo, Principality of Asturias, Spain

Aims: Pre-doctoral

Awarding entity: Fundación HC Energía

Amount of the grant: 2.705 €

Conferral date: 01/01/1995

Duration: 10 months

End date: 31/10/1995

Entity where activity was carried out: Hidroeléctrica del Cantábrico, S.A.

Faculty, institute or centre: Departamento de Medida y Control de Calidad de la Dirección de Distribución



Prizes, mentions and distinctions

- 1** **Description:** Premio al Mejor Poster
Awarding entity: International Conference on Renewable Energy and Power Quality (ICREPQ'10)
Conferral date: 03/2010
Recognition linked: Por el trabajo "Experimental application of leakage flux to the detection of insulation faults on disc-type winding transformers".
- 2** **Description:** Premio Extraordinario de Doctorado
Awarding entity: Universidad de Oviedo **Type of entity:** University
Conferral date: 2001
Recognition linked: Por la Tesis Doctoral "Funciones de transferencia para el análisis en distintas condiciones de funcionamiento de la distorsión armónica asociada a rectificadores trifásicos".

Periods of research activity

- Nº of recognized periods:** 3
Certifying entity: Comisión Nacional Evaluadora de la Actividad Investigadora (CNEAI) **Type of entity:** State agency
Date of recognition: 2014